#### **WIBAUX COUNTY**

## COMMUNITY WILDFIRE PROTECTION AND PRE-DISASTER MITIGATION PLAN



Beaver Creek Flood, June 7, 1929

Prepared by: Cossitt Consulting Beck Consulting Rand Herzberg

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#### Resolution No. 05-10

# A Resolution To Approve and Adopt The Wibaux County Community Wildfire Protection And Pre-Disaster Mitigation Plan

WHEREAS, Wibaux County has prepared a Community Wildfire Protection and Pre-Disaster Mitigation Plan ("The Plan");

WHEREAS, the Plan covers rural areas of the county and the Town Of Wibaux; and

WHEREAS, the Plan meets all the requirements of the Interim Final Rule published in the Federal Register on February 26, 2003, at 44 CFR Part 201 as part of the Disaster Mitigation Act of 2000.

#### NOW, THEREFORE BE IT,

RESOLVED, the Wibaux County Community Wildfire Protection and Pre-Disaster Mitigation Plan is approved and adopted.

FURTHER RESOLVED, The Wibaux County Wildfire Protection and Pre-Disaster Mitigation Plan is to be followed and incorporated into planning for the County.

FINALLY RESOLVED, the County will work and cooperate with the Town of Wibaux in the County to implement the Wibaux County Community Wildfire Protection and Pre-Disaster Mitigation Plan.

PASSED and APPROVED by the day of Movember	Wibaux County Co _, 2005.	mmission this Z
FOR THE COUNTY OF WIBAUX, MT.		
00 11 11 01 01	Sandy Sandra Nelson	
Illemy Hutchinson	Glenn Hutchinson	
Duf Baken	Leif Bakken	* * * * * * * * * * * * * * * * * * * *
Attest: Saturia Zendo	∠Patricia Zinda	

### Resolution No. 2005-05

# A Resolution To Approve and Adopt The Wibaux County Community Wildfire Protection And Pre-Disaster Mitigation Plan

WHEREAS, The Town Of Wibaux has prepared a Community Wildfire Protection and Pre-Disaster Mitigation Plan ("The Plan");

WHEREAS, the Plan covers The Town of Wibaux and the County of Wibaux; and

WHEREAS, the Plan meets all the requirements of the Interim Final Rule published in the Federal Register on February 26, 2003, at 44 CFR Part 201 as part of the Disaster Mitigation Act of 2000.

#### NOW, THEREFORE BE IT,

RESOLVED, the Town Of Wibaux Community Wildfire Protection and Pre-Disaster Mitigation Plan is approved and adopted.

FURTHER RESOLVED, The Wibaux County Wildfire Protection and Pre-Disaster Mitigation Plan is to be followed and incorporated into planning for the Town Of Wibaux.

FINALLY RESOLVED, the Town Of Wibaux will work and cooperate with the County of Wibaux to implement the Wibaux County Community Wildfire Protection and Pre-Disaster Mitigation Plan.

PASSED and APPROVED by the Town Of Wibaux a day of _November, 2005.	9th
TOWN OF WIBAUX	
By John D. Evans	
Attest: Huny archdale Ginny Archdale	



#### Wibaux County, Montana

#### Community Wildfire Protection Plan Approval Signatures

Wibaux County Fire Warden and Volunt	eer Fire Department Chief
Date: 11-15-05	Brian Nelson
Wibaux County Disaster and Emergenc	y Services Coordinator
Date: 1-1-05	Frank Datta Frank Datta
Department of Natural Resources and C Office, Area Manager	Conservation, Eastern Area Land
Date: 12-6-05	Rich Stolmye

#### **Executive Summary**

Wibaux County, Montana, established in 1914, is home to 977 residents. The county has prepared this community wildfire protection and pre-disaster mitigation plan for the purpose of becoming more disaster resistant. Every effort was made to draw all interested parties into the preparation of the plan whether formally at the series of public meetings, or informally through one-on-one conversations. A Steering Committee appointed by the county commissioners oversaw the preparation of the plan by a contractor. The mitigation goals, objectives, and actions or projects were developed utilizing a wide range of expertise and interests located within the county.

The natural disasters of most concern to participants in the planning process were drought, flooding, hazardous material spills, wind events, and winter storms. Each of these hazards is profiled in the following plan with a discussion of historic occurrences and vulnerability. Loss estimates for each of the hazards of concern in the county indicate that a flood of the town of Wibaux by Beaver Creek is likely to cause the greatest direct economic impact within the county and could cause the loss of one or more lives.

The two jurisdictions, the town and county of Wibaux have somewhat, but not significantly different risk exposure. The town has risk exposure to four of the hazards; flooding, hazardous material spills, wind events, and winter storms. The county has exposure to all five of the hazards, with less risk from flooding of Beaver Creek and more risk from flash flooding. Hazardous materials move through the county on two state highways and the interstate and through both the town and county on the railroad. The risk of wildland fire from person-caused ignition occurs along travel, railroad, and utility corridors. Wildfires started by lightning can occur anywhere in the county.

Five goals with corresponding objectives and projects were developed for the identified hazards of concern with additional goals developed for fire protection.

- Mitigate potential loss of life, property, and infrastructure from flooding of Beaver Creek.
- Manage impacts of severe winter storms.
- Manage impacts of long-term drought.
- Minimize the impact of hazmat incidents.
- Reduce the impacts of wind events.

This plan serves the following jurisdictions, the town of Wibaux and Wibaux County.

#### **ACRONYMS USED IN THIS PLAN**

BLM Bureau of Land Management

CD Conservation District

CRP Conservation Reserve Program CRV Current Replacement Value

CWPP Community Wildfire Protection Plan

DEQ Montana Department of Environmental Quality

DES Disaster and Emergency Services
DOL Montana Department of Livestock

DNRC Department of Natural Resources and Conservation

DPHHS Montana Department of Public Health and Human Services

E-911 Enhanced 911 emergency calling EMS Emergency Medical Services EOP Emergency Operations Plan

FEMA Federal Emergency Management Agency

FmHA Farmers Home Administration

FSA Farm Service Agency (US Department of Agriculture)

FWP Montana Fish. Wildlife and Parks

HAZMAT Hazardous Materials

ISO Insurance Services Organization
LEPC Local Emergency Planning Committee
MACO Montana Association of Counties

MBMG Montana Bureau of Mines and Geology MDT Montana Department of Transportation

MDU Montana Dakota Utilities

NFIP National Flood Insurance Program

NFP National Fire Plan

NOAA National Oceanic and Atmospheric Administration NRCS Natural Resources and Conservation Service

NWS National Weather Service PDM Pre-Disaster Mitigation

PPE Personal Protective Equipment

RFA Rural Fire Association RFD Rural Fire Department

USDA United States Department of Agriculture

USGS U.S. Geological Survey
VFA Volunteer Fire Association
WUI Wildland Urban Interface

#### **Chapter I: Introduction**

#### **Authority**

Wibaux County intends to become a disaster resistant community by preparing and implementing this Community Wildfire Protection and Pre-Disaster Mitigation Plan. The plan identifies mitigation measures to be taken, guides the expenditure of funds, and raises the awareness about the importance of taking personal and collective (public and private) responsibility for reasonably foreseeable natural disasters. The plan has been prepared utilizing funds from the Bureau of Land Management supplemented by county match met by participation in the planning process. The plan meets the requirements of the National Fire Plan and the Interim Final Rule published in the Federal Register on February 26, 2003, at 44 CFR Part 201 as part of the Disaster Mitigation Act of 2000.

#### Scope and Plan Organization

This plan is organized into six major chapters.

#### Chapter I. Introduction

This chapter provides background material to put the plan and mitigation strategies into the context of Wibaux County's unique assets, resources, and hazards.

#### Chapter II. Planning Process

This chapter describes how the plan was developed, including public involvement.

#### Chapter III. Hazard Evaluation and Risk Assessment

This chapter gives information about historical disaster occurrences in the county then lists potential hazards, hazard profiles, critical facilities, and vulnerabilities. Chapter III also provides information about asset values, for example, how much the county courthouse, the town hall, or the municipal water treatment plant would cost to replace if it was lost in a disaster.

#### Chapter IV. Mitigation Strategy

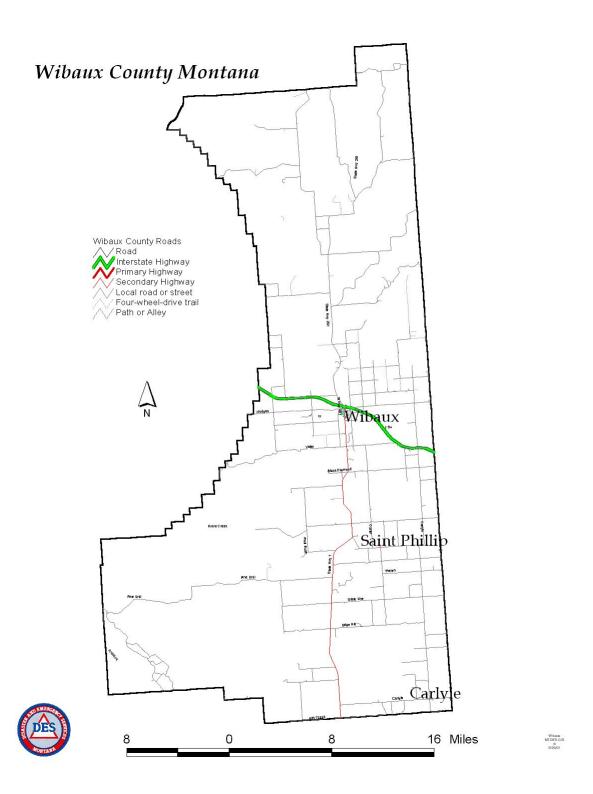
This chapter takes the hazard information and develops goals, objectives and projects that can be accomplished to lessen the chances and/or severity of a potential disaster. Recognizing the limitation of resources to accomplish all projects identified, Chapter IV also provides the local priorities for the projects.

#### Chapter V. Wildfire Protection

This chapter addresses wildland fire issues for the county. The current situation with respect to vegetation and fuels, past occurrences of fire, values at risk, and potential losses are described. This chapter also contains goals, objectives, and mitigation actions (projects) that can be done to reduce risk of wildland fire. The projects are prioritized.

#### Chapter VI. Plan Maintenance

This chapter describes how the plan is to be maintained and kept current. Those responsible for maintaining the plan are identified.



#### Preparation of the Plan

The pre-disaster mitigation section of the plan was prepared by Barb Beck, the community wildfire assessment and mitigation was prepared by Rand Herzberg. Both planners were under contract to Cossitt Consulting. County Disaster and Emergency Services Coordinator, Frank Datta, served as the primary contact for the county and assisted in data collection, public involvement, and document review. Fire staff input was critical in developing the wildfire risk assessment and mitigation. A portion of the photographs utilized in the news releases and the plan were provided by County DES Coordinator, Frank Datta, and District IV Disaster and Emergency Services Representative, Norman Parrent. Each of the signing entities to the plan, Wibaux County and the town of Wibaux, participated in the development of the plan through the Steering Committee, specifically by providing data, identifying mitigation projects, and setting project priorities.

#### **Project Area**

The project area for this plan is Wibaux County, Montana, established in 1914. The county is located in eastern Montana. It borders North Dakota to the east, Fallon County to the south, Prairie County to the west, Dawson County to the west-northwest, and Richland County to the north. Wibaux County is named after Pierre Wibaux, the son of a wealthy French textile manufacturer. Pierre Wibaux settled in the Beaver Valley in 1883 establishing himself as a successful cattleman. (Wibaux County Diamond Jubilee and Montana Centennial 1989)

The county contains one incorporated community, the town of Wibaux, which also serves as the county seat. Wibaux County encompasses 890 square miles (Montana Association of Counties) and is the third smallest county in the state in terms of land area. (Wibaux County Diamond Jubilee and Montana Centennial 1989) Emergency services for the county are dispatched out of Baker in neighboring Fallon County. The county is rural in nature with a density of 1.2 persons per square mile. The county is home to an estimated 977 residents. (U.S. Census Bureau Quick Facts, National Association of Counties web site) The population decreased 10.3% between 1990 and 2000. According to U.S. Census Bureau figures for 2000, the county had 584 households averaging 2.45 persons per household. The homeownership rate was 73.4%.

#### Land Use and Development Trends

Overall, land use in the county has been stable. The 2000 census gives the population for the town of Wibaux as 567 residents or 58% of the population in the county. Developed land in the county is primarily limited to the area of the town of Wibaux. Neither the town nor the county has experienced population or industrial growth (with the exception of oil and gas activity in the southwestern

area of the county) and consequently there has been little land use change or development.

The majority of lands in the county are in agricultural production, both farms and ranches. The steeper slopes are used for pasture and range. The 2004 Montana Agricultural Statistics reported 215 farms in the county with an average size of 2,492 acres per farm. The total land in farms is 535,786 acres. The number of farms, average size of farm, and total acres in farms all increased between 1997 and 2002. Wheat, oats, barley, peas, lentils, safflower, alfalfa, alfalfa grass mixture, durum, and green peas are the main crops for the county. (Jan Just, Farm Service Agency) Despite its relatively small size, the county ranked 5<sup>th</sup> in the state in oat production, and 10<sup>th</sup> in the production of durum wheat in 2003. According to the Soil Survey for Wibaux County completed by the Soil Conservation Service in 1958, "The natural fertility of soils suitable for crops is fairly high." (P.7) However, the risk of water and wind erosion of soils in much of the county is severe. (P.4) The county has very few irrigated acres, those that are irrigated are found in the northern-most portion of the county along the Yellowstone River. (Johnson, January 6, 2005) Wibaux County ranked 40th in the state for revenues from crop production and 41<sup>st</sup> in the state for revenues from livestock and livestock products. (Montana Agricultural Statistics, 2004)

The county has one perennial stream within its border, Beaver Creek, which runs from south to north through the center of the county. Beaver Creek flows along the east side of the town of Wibaux and then turns to the north and east passing through the Little Missouri Grasslands in North Dakota before eventually reaching the Missouri River. In the far northwestern corner of the county, the Yellowstone River serves as the county boundary between Wibaux and Dawson Counties for approximately 3.5 miles.



Beaver Creek Flood, June 7, 1929

In addition to the perennial stream, there are numerous intermittent streams and drainages located across the county. When running, these streams form the tributaries of Beaver Creek and other streams which flow to the northwest through Dawson County towards the Yellowstone River. Elevations range from approximately 2200 feet above sea level in the northwest corner of the county along the Yellowstone River to 3077 feet on Blue Mountain in the northeast corner of the county.

Land ownership in the county is predominantly private. Private lands are owned by individuals, farms and ranches, oil companies, and the Burlington Northern Santa Fe railroad. Scattered state sections comprise the largest amount of publicly-owned land, followed closely by lands managed by the Bureau of Land Management (BLM)--26,033 surface acres--in the western half of the county. In addition to the surface acres, BLM manages 213,797 acres of subsurface or minerals in the county. (Montana BLM Annual Report, BLM website) The U.S. Fish and Wildlife Service owns and manages a small amount of land at the Lamesteer National Wildlife Refuge in the southeast of the county.

Neither the town nor the county of Wibaux has a growth policy or comprehensive plan at this time.

#### **Climate and Weather**

Wibaux County is located east of the Continental Divide and subject to continental weather patterns. In general summers are hotter, winters are colder, precipitation is less evenly distributed, skies are sunnier, and winds are stronger than on the west side of the divide. (Western Region Climate Center, Climate of Montana) Prevailing winds generally blow from the west and north. Extreme weather in the county consists of severe thunderstorms containing wind, lightning and hail, tornadoes, and severe winter storms with heavy snowfall, cold temperatures, ice, and strong winds.

Table 1.1 Average Temperatures 7/1/1948-9/30/2004

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Ave	24	31	41	56	67	77	85	85	73	59	40	29	56
max													
Ave	2	8	17	28	39	48	53	51	40	30	17	7	28
min													

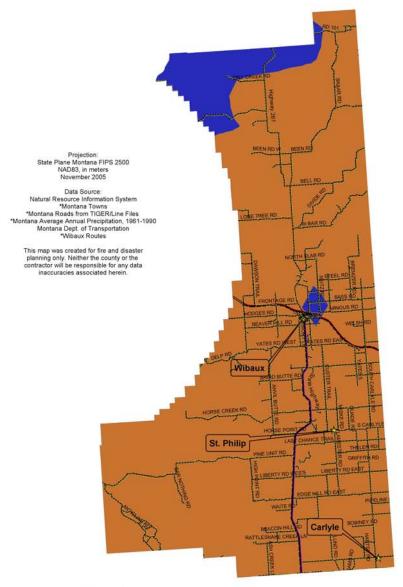
Notes: Temperatures have been rounded to nearest 1 degree Fahrenheit.

Source: Western Regional Climate Center Period of Record Monthly Climate Summary

(wrcc.dri.edu)

The average number of frost-free days in the county is 113. Average annual precipitation is 14.7 inches. (Montana Agricultural Statistics, 2004)







## Wibaux County Precipitation

Monthly snowfall records have been kept at the Wibaux weather station since July of 1948. The largest amount of annual snowfall on record, 67.5 inches occurred during the winter of 1981-1982. The winter of 1955-56 holds the record for least snowfall among the years that records were complete, at 9 inches. The mean annual snowfall amount is 30.6 inches.

Weather events are covered in more detail in Chapter III under each hazard profile.

#### **County Economy**

Wibaux County residents had a per capita personal income (PCPI) of \$20,024 in 2002, which was 81% of the state average and 65% of the national average. (U.S. Department of Commerce, Bureau of Economic Analysis Bearfacts Web Site)

According to the Montana Department of Labor and Industry as reported on December 31, 2004, the unemployment rate for the county was 2.6%. Wibaux County had 23 private non-farm establishments with paid employees in 2001. The private non-farm employment was 146. Slightly more than 15% of the persons in the county were below the poverty level in 1999. (U.S. Census Bureau QuickFacts Web Page)

According to the latest information available from the U.S. Census Bureau County, 1997 Business Patterns by Standard Industrial Code (SIC), services make up the largest major industrial sector in the county, employing 81 individuals with an annual payroll of \$937,000. The services sector is followed by retail trade with 39 employees and an annual payroll of \$249,000. Construction; manufacturing; transportation and public utilities; and finance, insurance, and real estate made up the rest of the economy in 1997 with from 1-10 employees each. Town, county, state, and federal entities each provide a small number of jobs.

Cash receipts from the sale of principal agricultural products and government payments in the county for 2002 totaled \$13,504,000. Wibaux County ranked 46 in Montana in all cash receipts. According to the Wibaux County Soil Survey (1958) "Insufficient moisture during the growing season is the primary factor limiting crop production in Wibaux County." The small size of the county also contributed to this ranking. Other hazards to agriculture in the county include insufficient moisture, hot periods during mid-summer, high winds, hail, disease, and insects.

#### **Transportation**

The primary transportation corridor in the county is Interstate-94. I-94 bisects the county running generally east-west. State Highway 7 runs south from Wibaux to the county line and into Fallon County. State Highway 261 runs north from Wibaux to the county line and into Richland County. A network of county roads following section lines where topographically feasible completes the public vehicle transportation network. Private ranch roads throughout the county provide the remainder of the access for rural residents.

The Burlington Northern Santa Fe (BNSF) railroad also passes through the county. The railroad track follows the interstate from Wibaux east to the state line and runs south of and roughly parallel to the interstate from Wibaux climbing to a high point at the Wibaux-Dawson County line. BNSF carries coal, grain, and merchandise including hazardous materials on track crossing the county.

The Federal Aviation Administration lists one airport in Wibaux County, Hollstein Ranch Airport. The FAA identifier is MT20. This is a private airport located 8 miles southeast of the town of Wibaux. No commercial air service is available within Wibaux County, however, daily commercial service is available in nearby Glendive at the Dawson Community Airport.

#### References

Climate of Montana, Western Regional Climate Center, wrcc.dri.edu
Johnson, Katrina. NRCS, personal communication, January 6, 2005
Montana Agricultural Statistics 2004, Montana Agricultural Statistics Service
Montana Association of Counties Directory, 2005
Montana Bureau of Land Management Annual Report 2004, www.mt.blm.gov
Montana Local Government Center, http://www.montana.edu/wwwlgc/profiles
U.S. Census Bureau, http://quickfacts.census.gov, http://censtats.census.gov
U.S. Department of Commerce, Bureau of Economic Analysis, www.bea.doc.gov
Wibaux Pioneer-Gazette. Wibaux County Diamond Jubilee and Montana
Centennial, 1989

#### **Chapter II: Planning Process**

#### Approach

This plan was prepared through a combination of research by the Wibaux County Disaster and Emergency Services Coordinator, the Montana DES District IV Representative, the contracted planner, the National Weather Service, and Steering Committee/public meeting input. All individuals contacted for information, from local and state government, to various businesses, were extremely responsive and helpful. Existing local, state and federal plans were consulted and reviewed. These are cited throughout the plan.

The public involvement philosophy for the preparation of this plan was to ensure that any and all interested individuals be offered the opportunity to participate in plan development. At the same time it was recognized that a number of individuals in key positions were critical resources to the process by virtue of their knowledge and expertise. The process sought to engage both these knowledgeable individuals and the general public. Personal letters of invitation, news articles in the Wibaux Pioneer Gazette, and flyers posted around Wibaux were the primary means by which information about the planning process was made available to the public. The county does not have a website.

#### **Plan Steering Committee**

The planning consultant recommended to the County Commissioners that a project Steering Committee be established. The role of the Steering Committee was to represent a wide range of interests, serve as a technical resource, guide the planning process, and finally review the draft document for accuracy and completeness.

At the project kick-off meeting with the County Commissioners, County Disaster and Emergency Services Coordinator, Montana DES District IV Representative, the Bureau of Land Management, and the planning consultant, interests and entities were identified that needed representation on the Steering Committee. Based upon this conversation, the County Disaster and Emergency Services Coordinator developed the list of Steering Committee members starting with the County Local Emergency Planning Committee (LEPC) and adding members to address the interests identified. The Steering Committee included 33 individuals representing local government (town and county), state and federal agencies, emergency services, law enforcement, business and insurance, communications, electric utility, veterinary services, health care, public schools, senior citizens, and the media. Steering Committee members received personal letters of invitation from the Commissioners to serve.

Table 2.1 WIBAUX COUNTY CWPP/PDM STEERING COMMITTEE

Name	Representing
Glen Hutchinson	County Commission
Brian Nelson	Wibaux Fire Dept.
Dale Evans	Mayor, Town of Wibaux
Daio Evario	Assistant Fire Chief
	Utility-Goldenwest Electric
Frank Datta	DES, Coroner, Newspaper
Mike Schneider	DES, Fire Dept, National Guard
Kim Bacon	Fire Dept, Road Dept, Reserve Officer
Terry Johnson	Public, LEPC
Kirby Eisenhauer	School Superintendent
Gerald Job	EMS, Fire Dept.
Teresa Zeimer	EMS
Barb Maus	Public Health
Shane Harrington	County Sheriff
Ed Bach	DOT, Fire Dept.
Terry Hall	Veterinarian
Rick Stromeyer	DNRC
Maureen Brophy	Wibaux County Nursing Home
Ginny Archdale	Town Clerk, County Planning Board
J.D. Hutchinson	Weed Board
Jerry Smith	State Fire Inspector
Jan Just	Farm Service Agency
Katrina Johnson	NRCS
Jim Kane	Wibaux Conservation District
Bill Franks	Insurance
Dennis Snow	County Sanitarian
Steve Baertsch	MDU
Bill Teeters	Mid-Rivers
Dave Bertelsen	Town of Wibaux, Chamber of Commerce,
	County Extension
Don Lauf/Mary Morth	Cenex
Rex Knight	Town Public Works
Karen Hartse	Senior Citizens
Randy Sanders	DNRC
Norman Parrent	District IV DES Representative
Dena Sprandel Lang	Bureau of Land Management

#### **Steering Committee/Public Meetings**

Public meetings were held on February 10, April 12, and May 10, 2005. Each meeting was noticed in the Wibaux Pioneer-Gazette with one or more articles and photographs. The articles explained the purpose of the meetings, the planning schedule, the topic for the upcoming meeting, and provided contact information for questions or comments. Following each meeting, the Pioneer-Gazette printed an article about the meeting to inform people who may have missed the meeting and to encourage future involvement.

Each of the meetings was held in Wibaux at the county courthouse on a weekday evening. Wibaux is the only incorporated community in the county. Attendance at the first meeting was 26 with subsequent meetings having fewer attendees. Sign-in sheets are provided later in this chapter.

Meetings were facilitated by the planning consultant according to an agenda developed prior to each meeting. Each meeting began with introductions and an explanation of the purpose of the CWPP/PDM Plan and the planning process. Meetings were focused and time spent efficiently. Following each meeting, a meeting summary was prepared to document the input gathered.

#### **Document Review**

Draft chapters were prepared according to a schedule for deliverables in the contract and upon completion, provided to the County Disaster and Emergency Services Coordinator. The County Coordinator presented the draft of Chapter III. Hazard Evaluation and Risk Assessment to the LEPC for additional input.

Following the final public meeting, a draft of the entire document was assembled and provided to the county for public review. The draft document was made available at the town of Wibaux, Wibaux County, and the Wibaux public library. The comment period was open for 30 days. The availability of the draft document was announced three times in the Pioneer-Gazette.

Following incorporation of the comments received, the plan was finalized. Draft resolutions were prepared for the town of Wibaux and Wibaux County for adoption and approval of the plan. These signed resolutions can be found in the Executive Summary at the front of the plan.

## **Meeting Agendas**



**Project Kick-Off Meeting with County Commissioners** 

#### Wibaux County CWPP/PDM Plan Kick-Off Meeting Agenda January 6, 2005 (2 hours)

\_\_\_\_\_

#### Introductions

## What is a PDM Plan, why do one, and what is the planning process?

Quick overview by planning consultant

#### **Review of contract deliverables**

Discuss any county or contractor concerns

#### Coordination

Meeting logistics Meeting scheduling considerations Working with the Steering Committee Communications during the project

#### **Getting to work!**

Recollections of past natural disasters
What hazards are of most concern to you?
Information sources (local or county plans, maps, knowledgeable, individuals, county records, etc.)
Media contacts
Develop list of potential Steering Committee members
Set first public meeting date, time, and location

#### **Exchange contact information**

#### Other items

# Wibaux County CWPP/PDM Steering Committee February 10, 2005 County Courthouse, 7 p.m. Meeting Agenda

#### Introductions

## Community Wildfire and Pre-Disaster Mitigation Planning (Beck, Herzberg)

- What is a CWPP/PDM Plan and why do one?
- What is the role of the Steering Committee?
- What are the overall timeframes and schedule for the project?

#### Recollections

- Steering Committee recollections of past natural disasters in the county (what, when, and where)
- Other resources to obtain this/related information?

#### Potential natural disasters

- Group brainstorm of natural hazards
- Prioritize list of potential disasters
- Fill out Hazard Worksheet

#### Critical facilities and vulnerable populations

- What are the critical facilities and infrastructure?
- What are the vulnerable populations?

#### Wrap-up

- Next steps
- Questions and comments
- Adjourn

#### **WIBAUX COUNTY**

#### CWPP/Pre-Disaster Mitigation Plan Steering Committee/Public Meeting Agenda April 12, 2005

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#### Welcome and introductions

#### Recap:

Why do a CWPP/PDM Plan?
What is in the plan?
Discussion and products of first meeting
Risk evaluation and hazard assessment

#### Develop goal statements

Beaver Creek flood, drought, winter storms, hazardous material incidents, tornadoes and wind events

#### Develop preliminary list of projects

#### Wrap-up

Comments/questions on meeting Review schedule Next steps, next meeting

# WIBAUX COUNTY CWPP/PDM PLAN Steering Committee/Public Meeting Agenda May 10, 2005

\_\_\_\_\_\_

#### Welcome/introductions

#### **Quick Review**

Purpose of PDM Plan Where we are in the planning process Tonight's tasks

#### **Goals and Objectives**

Goals statements, objectives Review preliminary list of projects identified at last meeting Review preliminary list of fire projects

#### **Project identification**

List additional project ideas under the objectives

#### **Project Prioritization**

Prioritize all projects in high, medium, and low bands

#### Wrap-up

Schedule for finalizing the plan Where to find copies How to comment Thank you for your participation!

## **Meeting Summaries**

# Project Kick-off Meeting Wibaux County CWPP/PDM Plan January 6, 2005

#### Introductions

Participants introduced themselves and signed in. In attendance: Leif Bakken, Barb Beck, Anne Cossitt, Frank Datta, Glen Hutchinson, Sandy Nelson, Norman Parrent, Brad Sauer.

#### What is a CWPP-PDM Plan and Why Do One?

Barb Beck reviewed what a CWPP-PDM plan is and why preparing this plan will benefit the county. Beck explained that the plan would address the current situation, past occurrences of disasters, and develop goals and projects. Once the plan is completed the county will be eligible to compete for funds to complete projects in the plan.

#### **Coordination/logistics**

The group discussed where and when to hold the public meetings. It was decided that all should be held in Wibaux. The first meeting will be held at 7 p.m. in the county courtroom on Thursday, February 10, 2005. Barb will develop a letter of invitation to the Steering Committee members and Frank will get the letters mailed out. The letter is to be signed by the commissioners.

The group identified who should be asked to serve on the Steering Committee using the list of LEPC members and expanding upon it to include a variety of interests.

The primary line of communication on the project will be between Frank and Barb. Frank will keep the commissioners appraised as needed. Commissioners are welcome to see all work products as they would like.

#### **Recollections of Past Disasters**

The commissioners and DES Coordinator recalled the following incidents: June 1929 flood, 1948-49 blizzards, 1951-51 blizzards, 1964-65 blizzards, 1965 flash flood, February 1978 blizzards, May 1980 lightning-caused wildfire.

The commissioners and DES Coordinator stated that the things they were most concerned about related to potential disasters included: pipeline incident, any type of disaster requiring communications (currently there is very little cellular coverage in the town and county), train wreck or truck wreck. Trucks carry hazardous materials on the Interstate and oil products on Highway 7. The railroad tracks pass in close proximity to the school.

#### CWPP/PDM Plan Steering Committee Meeting February 10, 2005 County Court House, Wibaux

The meeting was noticed in the Wibaux Pioneer-Gazette. Invitation letters were hand-delivered to each Steering Committee member in the two weeks prior to the meeting.

#### **CWPP/PDM Planning**

Planner, Barb Beck, gave a brief presentation explaining what a Community Wildfire and Pre-Disaster Mitigation Plan is, why the county would prepare such a plan, and the benefits of completing this plan. The benefits include being prepared for a disaster, being eligible for project funds, and being eligible for post-disaster assistance if something were to happen.

The participants were then asked to recollect past natural disasters.

Disaster Type	Where	When
Structural Fire	Hartse's barn	2002
Flash Flood	20 mi N of Wibaux	June 15, 1965
Wildfire	N of Wibaux	1980, 1999
Creek Flood	Wibaux	1929
Blizzard	County-wide	1964-65, 1978-79
Tornado	N of Wibaux	June 1952
Freezing Rain	Wibaux County	1955

The Steering Committee and public then brainstormed a list of potential natural and other disasters/hazards in the county. The whole group prioritized the top three hazards of most concern for the future.

- 1) Drought
- 1) Railroad or interstate incident involving hazardous materials
- 3) Flood of Beaver Creek Blizzards Wildfire

Tornadoes and wind events

The group then brainstormed critical facilities for continuing government operations and protecting public health and safety in the event of a disaster.

#### **Critical Facilities in Wibaux County**

- Grocery store
- County courthouse
- Town water wells (2) and water distribution system
- Town Hall
- Highway 7 bridge, south edge of Town of Wibaux
- Communications infrastructure/Beaver Hill
- REA and MDU Substations
- Nursing home
- Fire and ambulance building

#### **Vulnerable Populations**

Nursing Home Home daycare Individual elderly residents in Town of Wibaux Stranded motorists (in event of a winter storm)

#### Wrap-up

Beck explained that she would take the information from this meeting and do some research and background writing. She will return to Wibaux for the next meeting to be held on April 12, at 7 p.m. at the courthouse. She thanked participants for attending and encouraged them to attend the two future meetings where goals and projects will be identified and prioritized.



Photo taken by Norman Parrent

# Wibaux County Steering Committee/Public Meeting Notes April 12, 2005, Wibaux

#### Welcome

Participants were welcomed. The meeting agenda was reviewed.

#### Recap

Barb reviewed the purposes for preparing a PDM plan. They are to think ahead of time about natural disasters to prepare for them, to be eligible for project funds, and to be eligible for post-disaster assistance from FEMA. She explained that the plan looks at historical information about disasters in the county as a way of identifying what might happen in the future.

The plan is being prepared under the guidance of a steering committee. The fire sections are being prepared with the assistance of the fire personnel in the county. The first meeting was held in Wibaux in February and the group identified the hazards of most concern to them as flooding of Beaver Creek, drought, hazardous material incidents, tornadoes and wind events, and winter storms. Barb presented some of the results of her research into past disasters of these types in the county.

#### **Goal Statements**

The group discussed draft goal statements and agreed on the following.

- Mitigate potential loss of life, property, and infrastructure from flooding of Beaver Creek.
- Manage impacts of severe winter storms.
- Manage impacts of long-term drought.
- Minimize the frequency and impact of hazmat incidents.
- Reduce the impacts of wind events.

Project ideas included warning and education activities, obtaining a NWS weather radio repeater, shelter planning, back-up power supply for town, training for responders and the public related to hazmat incidents, and an evacuation plan for Wibaux.

#### Wrap-up

Barb explained that following the next meeting a draft plan will be provided for public review. After the comments are incorporated the plan will be finalized and submitted to the town and county for approval. The plan then goes to the state and FEMA for final approval. The next meeting to finalize and prioritize the projects will be held on May 10 at 7 p.m. at the courthouse.

#### WIBAUX COUNTY CWPP/PDM PLAN Steering Committee/Public Meeting Notes May 10, 2005

#### Welcome

Barb Beck welcomed participants and explained that this was the third and final planning meeting for the CWPP/PDM plan for Wibaux County.

#### **Quick Review**

Contractor Beck reviewed the purpose of PDM Plan, who approves it, and how it has been funded. She explained that the tasks for the evening were to review the goals, objectives and projects, add or delete, and prioritize the projects.

#### **Goals and Objectives**

A preliminary draft of the hazard mitigation chapter including the goals, objectives, and projects was handed out. The group read through the goals, objectives, and projects for the non-fire potential disasters. Projects were added and deleted. The contractor presented the three draft fire goals.

#### **Project Prioritization**

Meeting participants went through each project as a whole group and prioritized them into high, medium, or low based upon subjective judgment against the following criteria. The prioritized project list is found in Table 4.1 in Chapter IV.

- Number of lives at risk
- Value of property at risk
- Infrastructure at risk
- Risk of business interruption/loss
- Cost/benefit of the project

#### Wrap-up

Barb explained that a draft of the entire document would be available for a 30-day public review period once the maps and fire goals have been finalized. The review period will likely begin in July. Copies will be made available at the Wibaux town hall, county courthouse, and public library. Once the review period has ended, the plan will be finalized and submitted for approval by the town and county. Following that it will go through state and federal review. Participants were thanked for their involvement in the planning process.

## Sign-in Sheets

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Name: Frank Datta		withaux pridervers.com			
Tille: Cooridnator	PES/Commen/Nows	406-796-2218	$\vdash$		
Name: Norman B. Janen	DMH/PES	Passes Midning Com			
Title: District TE Perp		4062345809	$\vdash$		
Name: Barb Beck	Cossitt Consulting	barbbeck@cablemt.net			
Title:	U	446-3628	+-+		
Name: Tim KAWE Title:	cons. Dist.	Kaneranch @carthlinkinet 195-2979			
Name: Peter 3. Schieffer	Tour of Wibaux	Box 53 Wilaut mt	F		
Title: City Otherman DD	100Kg 0019KUP	796-259/			
Name: Dava Roberts	Panchus	Wiberpel			
Title: Buch Kelesh	Porterus	Wilson			
Name: Harlse	Senior Citizen	WSC @midrivers.com			
Title: Senior Aide		796-6043			
Name: JOHN Sokoloski .	Goldenwest Electric	givec @ midnivers com			
Title: Mg V	Coop Coop	796-2423	$\vdash$		
Name: KEUIN HUDGISUN	MO-	796 2542			
Title: Tect /	MOT				
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Title:	County Commission	100			
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Title: Williams (in Est. Cigent	Council, Extension	796-2486			
Name: Bruce Smitt	WFD	796-8239			
Title:					
Name: Dlane Therrighter		Wibaux 523 Opotomail.com		-	
Title: Shenss	weso	406-716-2415			
Name: Sunt Sunt Tide: AFSA - CCD		yen just@int usda. 500			
	USDA+PSA	796-2221			
Name: Illenn Hutcherson	County Commission				
Title					
Name: Barb Maus	Public Health	webonrs (0 moun	10.1	52	~
Title:		(406) 796-2485			

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Name: Dave Bertelsen	Town Council	wiscoext@midrivers.com		
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Rev. 4/23/03

## Correspondence

#### **Board Of County Commissioners**

Wibaux County P.O. Box 199 Wibaux, Montana 59353

You are invited to serve on the Steering Committee to guide the preparation of Wibaux County's Community Wildfire Protection and Pre-Disaster Mitigation (CWPP/PDM) Plan.

So, what is this plan and what purpose does it serve? The primary purpose of the CWPP/PDM Plan is to increase the county's resistance to natural disasters. Among other things, the PDM will look at historic disasters, identify those types of disasters the county is at most risk from, and propose projects to address those hazards. The portions of the plan that address wildfire will describe the current situation and values at risk, and also propose goals and projects to address the areas of concern.

And, there are important benefits for the county in preparing the plan. Once the plan is done, we will be eligible to compete for federal grant funds to complete projects, and the county will be eligible for assistance from the Federal Emergency Management Agency (FEMA) in the event we do experience a disaster such as a devastating flood, wildfire, or winter storm, for example.

The commitment we are asking of you is simple. Between now and the end of June, we'd like to have you attend one or more of the three two-hour evening Steering Committee/Public meetings. At these meetings, the Steering Committee and interested participants will provide guidance to the contractor we've hired to write the plan. The first of these meetings is scheduled for February 10, 2005, at 7:00 p.m. in the county courtroom. We hope to see you at as many of the three meetings as you can make, preferably all three.

Your participation will ensure that we end up with the highest quality plan possible. If you have any questions about the plan or your role as a Steering Committee member, please call our County Disaster Emergency Coordinator, Frank Datta, at 796-2218.

Sincerely,

Sandy Nelson

Sandy Nelson Glenn Hutchinson Dlenn Hutchinson

Leif Bakken Beif Bakken John Dale Evans Mayor, Town of Wibaux Wibaux, MT. 59353 January 14, 2005

Dear Mayor Evans:

I'm writing to let you know about a planning effort being initiated by the county. This effort will help the county and the town of Wibaux become more disaster resistant, make both the county and the town eligible for project funds, and ensure all residents in the county are eligible for disaster relief funds if a natural disaster does occur.

When completed, the plan must be approved by the state and the Federal Emergency Management Agency (FEMA.) The plan will need to be adopted by the county commissioners and the Town of Wibaux.

I have been contracted to prepare the plan for the county and wanted to let you know about the effort right from the start. I've enclosed a business card in case you have any questions about the project.

You will be receiving an invitation in the mail from the commissioners soon inviting you to participate as a Steering Committee member for the project. We plan to hold three Steering Committee/public meetings. The first meeting is scheduled for Thursday, February 10, in the county courtroom. I hope you or someone from the town is able to attend. I'll look forward to meeting you at some point in the process. Please feel free to call if you have any questions at all.

Sincerely,

BARB S. BECK

cc: Datta

# Meeting Flyers and Articles from the Wibaux Pioneer-Gazette



## WIBAUX TOUNTY

# DISASTER TLANNING MEETING

Tuesday, April 12

J:00 p.m.

Tounty Tourthouse

Open to the public.

Anyone with an interest is encouraged to attend and participate.

For more information, contact:

County Disaster Emergency Coordinator, Frank Datta, 796-2218 Contractor, Barb Bock, 446-3628



notech.com



nvtech.com



## WIBAUX TOUNTY A PTANNING

# DISASTER PLANNING MEETING

Tuesday, May 10

6:00 p.m.

Tounty Tourthouse

Open to the public.

Anyone with an interest is encouraged to attend and participate.

For more information, contact:

County Disaster Emergency Coordinator, Frank Datta, 196-2218

Contractor, Barb Bock, 446-3628



notech.com



mitech.com



Wibaux County Commissioners Glenn Hutchinson, Sandy Nelson, and Leif Bakken, visit with Barb Beck and Frank Datta during a meeting held on January 6. (Norm Parrent photo)

### Wibaux County joins others in Pre-Disaster Mitigation Plan

astrous flood of Beaver Creek causing enormous economic losses to ance industry, transportation, utilibusinesses and the loss of three lives. Floods, wild fires, winter storms, and droughts are the primary natural disasters Wibaux County has experienced through time.

Each natural disaster has the potential to take lives, destroy property, and interrupt transportation and commerce. Plus, natural disasters are costly. For all of these reasons, Wibaux County is joining other counties across the country to prepare a Community Wildfire Protection and Pre-Disaster Mitigation Plan. Preparing the plan is a requirement for eligibility for emergency relief funds from the Federal Emer-gency Management Agency should the county experience a natural disaster. The project is made possible by funding from the Bureau of Land Management.

Cossitt Consulting out of Park City, Montana, will be preparing the firedisaster plan under the guidance of an expanded Local Emergency Planning Committee (LEPC) with representation from elected officials, law enforcement, public citizens, emergency medical services, fire protection, disaster emergency services,

In 1929, Wibaux experienced a dis- county public health, public works, the chamber of commerce, the insurties, and the public school system.

"If we had a major accident with a rail car or a semi hauling hazardous materials near Wibaux, the whole town might need to be evacuated. It's questions like these we can answer with the pre-disaster mitigation plan" stated Commissioner, Leif Bakken at the project kick-off meeting held with the contractors on January 6 in Wibaux.

The first meeting of the LEPC-Steering Committee is scheduled for 7:00 p.m. on Thursday, February 10. The meeting will take place in the county courtroom in Wibaux. A total of three meetings to develop the plan will be scheduled in Wibaux over the six months and anyone interested in participating is encouraged.

As a part of developing the plan, past disasters need to be documented and analyzed. "I'm really interested in hearing from long-time residents who have memories, even if they are just vague memories, of floods, wild fires, winter storms, or other natural disasters" stated Barb Beck. Anyone with information to share or questions about the project is encouraged to contact Beck at (406)446-3628.

VOLUME NO. 95 NUMBER 48 THURSDAY, JANUARY 20, 2005 Serving Wibaux County and the Town of Wibaux, Montana Since January, 1907

VOLUME NO. 95 NUMBER 50 THURSDAY, FEBRUARY 3, 2005

Serving Wibaux County and the Town of Wiba

# Disaster planni slated February

Important for public to participate

to the public, and anyone interested of Land Management.

"Preparing the plan is a require-

Emergency Planning Committee Disaster and Emergency Services (LEPC)/Steering Committee will be Coordinator, Frank Datta. In addiheld at 7:00 p.m. on Thursday, February 10. The meeting will be held in the county courtroom in Wibaux. A avoid and/or deal with disasters, and total of three two-hour meetings to will make the county eligible for develop the plan will be scheduled state and federal funds to do mitiover the next six months in Wibaux. gation projects. The project is made The planning meetings will be open possible by funding from the Bureau

attend one or more of the meetings. ning effort will be combined with for them so that losses are minithe preparation of a wildfire protecment for eligibility for emergency tion and mitigation plan. Barb Beck relief funds from the Federal Emer- and Rand Herzberg of Red Lodge about past natural disasters or ques-

The first meeting of the Local the county" according to County ergency Planning Committee with representation from town and county elected officials, local and county law enforcement, emergency medical services, fire protection, disaster emergency services, public health, sanitarian, public works, businesses, the insurance industry, transportation, utilities, media, and the public school system. "We realize that we can't prevent natural disasters from The pre-disaster mitigation plan- occurring, but we can better prepare mized" stated Beck.

Anyone with information to share gency Management Agency should will be preparing the plan under the tions about the project is encouraged

# Important public meeting scheduled this Thursday

Emergency Planning Committee Disaster and Emergency Services representation from town and county (LEPC)/Steering Committee will be held at 7:00 p.m. on Thursday, February 10. The meeting will be held in crease the ability of the county to services, fire protection, disaster emthe county courtroom in Wibaux. A total of three two-hour meetings to will make the county eligible for itarian, public works, businesses, the develop the plan will be scheduled over the next six months in Wibaux. The planning meetings will be open to the public, and anyone interested in participating is encouraged to attend one or more of the meetings. ning effort will be combined with for them so that losses are mini-

"Preparing the plan is a require-

The first meeting of the Local the county" according to County ergency Planning Committee with Coordinator, Frank Datta. In addition, developing the plan will inavoid and/or deal with disasters, and ergency services, public health, sanstate and federal funds to do miti- insurance industry, transportation, gation projects. The project is made utilities, media, and the public possible by funding from the Bureau school system. "We realize that we of Land Management.

the preparation of a wildfire protecment for eligibility for emergency tion and mitigation plan. Barb Beck relief funds from the Federal Emer- and Rand Herzberg of Red Lodge about past natural disasters or quesgency Management Agency should will be preparing the plan under the tions about the project is encouraged we experience a natural disaster in guidance of an expanded Local Em- to call Barb Beck at 406-446-3628.

elected officials, local and county law enforcement, emergency medical can't prevent natural disasters from The pre-disaster mitigation plan- occurring, but we can better prepare mized" stated Beck.

Anyone with information to share

**VOLUME NO. 95 NUMBER 51** THURSDAY, FEBRUARY 10, 2005

Veterans Bonnie Curran, Service Officer for the Montana Veterans Affairs Division will be in Wibaux on Tuesday, February 15 at the Courthouse from 10:00 to 11:00 a.m. She will be available to assist Veterans and their dependents concerning Veterans Benefits. For those who wich to apply for any benefits please have a copy of the Veteran's Military Discharge papers, preferably the DD form 214. will be held on Mondays & Tuesdays from 6:30 to 8:00 p.m. and on Thursdays from 6:30 to 7:30 p.m. at the Elementary Gym. Pinocle will be played every Friday at the Senior Center starting at 7:00 p.m. This is for all ages. Wibaux Disaster Planning Committee will meet on Thursday, February 10 at the Courtroom starting at 7:00 p.m. The public is invited. Morning Inside Fitness Walking Wibaux County Museum Board will meet on Thursday, February 10 in the Courtroom at 7:00 p.m.

Sazette, February 10, 2005-3

## Second public meeting set for **Pre-Disaster Mitigation Plan**

ings to prepare a Pre-Disaster Miti- plan for the town. gation Plan for Wibaux County is scheduled for Tuesday, April 12. The meeting will be held at 7:00 or projects will be further developed p.m. at the county courthouse. While the Steering Committee and Local Emergency Planning Com- will be made available at the library, mittee (LEPC) is helping to guide town hall, and county courthouse for the work of the contractor, all meet- anyone to review and comment on. ings are open to the public and any- Once the plan has been completed, one with an interest in the effort is the county and the Town of Wibaux encouraged to attend and offer input. will be asked to adopt it.

for property damage can be mini- exceed local resources. mized where possible."

Committee members listed potential learn how to get involved, you can natural and other hazards, identified contact Wibaux County Disaster critical facilities, and listed vulner- Emergency Services Coordinator, able populations among other things. Frank Datta at 796-2218, or con-The hazards that meeting partici- tractor, Barb Beck at 406-446-3628. pants identified as being of most concern in the county were:

- \* Flooding of Beaver Creek
- \* Drought
- \* Wildfires
- \* Winter Storms
- \* Hazardous material transportation accident
- \* Tornadoes and wind events

At this second upcoming meeting on April 12, the group will work on goals and projects to make the county more disaster resistant. Projects can include such things as awareness and education or actions to reduce potential damage in the event of a disaster. Some project ideas that have already surfaced include storing town records out of the floodplain, acquiring a weather re-

**VOLUME NO. 96 NUMBER 7** THURSDAY, APRIL 7, 2005

The second of three public meet- peater, and developing an evacuation

At the third and final meeting to be held later this spring, specific actions and prioritized. The contractor will put together a draft of the plan that

According to the contractor, Barb Following review of the plan by the Beck, "The purpose of the plan is to state and federal government to enthink ahead of time about what dis- sure legal requirements are met, the asters could occur and be prepared county and the town will be eligible for them. That way the risk of loss of to compete for grant funds to carry life can be reduced and the potential out the projects in the plan that

If you would like more information At their first meeting, the Steering about the planning process or to

## Pre-disaster goals approved

Participants at the second Pre- Joey Weed, and Mike Fischer and Disaster Mitigation Plan public planning contractor Barb Beck. meeting worked on goals to prevent and/or lessen potential impacts of of a five-county effort to make the future disasters in Wibaux County.

were Wibaux County Commissioner eligible to compete for project funds Glen Hutchinson, Wibaux County; eligible to compete for project funds prior to a disaster and receive assis-Disaster and Emergency Services tance if a disaster occurs, according Coordinator Frank Datta, Town of to Beck. Wibaux Aldermen Dave Bertelsen and Pete Schieffer, District IV State Disaster Emergency Services Representative Norman Parrent, Wibaux property, and infrastructure from County Health Nurse Barb Maus, residents Buck Roberts, Gerald Job,

The plan is being prepared as part area more disaster resistant. It will Taking part in the April 12 meeting also ensure that Wibaux County is

> The following goal statements were approved by the group:

> \*Mitigate potential loss of life, flooding of Beaver Creek.

> > Continued on back page

#### From page one

\*Minimize impacts of long-term drought.

realistically be done to meet these goals. Ideas for projects included ed- May 10 at the Wibaux County Court 406-446-3628. ucation and warning efforts, obtaining a back-up power supply for town, and getting a repeater station to be able to receive weather radio information.

Frank Datta pointed out that Wibaux is relatively distant from all three of the region's National Weather Service areas-Glasgow, Williston and Billings - so the weather information for Wibaux isn't always as accurate as it is in locations closer to the NWS stations.

Dave Bertelsen commented "educating the public so they know what to do during an emergency should be one of our top priorities.'

And, Buck Roberts said that he listens to the radio for weather in-

formation, pays attention to what the \*Minimize the frequency and im- jet stream is doing, and watches how pact of hazardous material incidents. his livestock are behaving to predict \*Manage impacts of severe winter what the weather is going to do.

\*Reduce the impacts of wind storm group to prepare a preliminary list of Beck will now use the work of the projects.

The next step in the process will be Attendees discussed what could to hold the final public meeting scheduled for 6:00 p.m. Tuesday, Datta at 796-2218 or Barb Beck at

House. At this meeting, the group will review the preliminary project list, and add and prioritize projects.

The draft plan will be completed by early summer and made available for public review. Anyone interested in making comments or learning more about the plan, can contact either Wibaux County Disaster and Emergency Services Coordinator Frank

### Scheduled May 10 at 6:00 p.m.

# Final pre-disaster plan meeting set

The final meeting in the process to from flooding of Beaver Creek. warn of imminent flooding. develop a community wildfire and \*Goal Two: Manage impacts of sepre-disaster mitigation plan will be vere winter storms. held at the Wibaux County Courthouse on Tuesday, May 10. The long-term drought. meeting will begin at 6:00 p.m.

protect people, property, and infrastructure from the inevitable natural wind events. disasters that can occur here including drought, winter storms, flooding, wildfire, and wind events, according to Planning Coordinator Barb Beck. Potential hazardous material spills will also be addressed.

can be done to achieve the following

\*Goal Four: Minimize the frequen-The county is preparing the plan to cy and impact of hazmat incidents. \*Goal Five: Reduce the impacts of

A number of project ideas were raised at the last planning meeting, held on April 12. Some of these suggestions included: developing a back-up power supply for operating vill also be addressed.

The meeting will focus on identthe town's water system, obtaining a radio repeater for National Weather ifying and prioritizing projects that Service forecasts and warnings, developing an evacuation plan for goals, Beck explained.

\*Goal One: Mitigate potential loss

Wibaux in the event of a hazardous material spill, and developing a

Following the meeting, the contractor will take the ideas for pro-\*Goal Three: Manage impacts of jects and prepare a draft of the plan.

"We're hoping for a good turnout at the meeting, because this is the opportunity for folks to say what they'd like to see in the plan," Beck emphasized. "If we get it in the plan, then the county can compete for funds to do the projects."

In the next several months, the draft plan will be made available for public review at the town hall, the county courthouse, and the library. An announcement will be made in The Wibaux Pioneer-Gazette when the draft plan is ready for review.

For additional information on the plan or to provide comments, you of life, property, and infrastructure, warning system for the town siren to can contact Barb Beck at 446-3628.

## Draft Community Wildfire Protection/Pre-Disaster Mitigation Plan ready for review

Wibaux County Disaster and Emer- disasters over the time period the for grant funds to do projects, but gency Services Coordinator Frank Datta announced the draft Community Wildfire Protection and Pre-Disaster Mitigation Plan will be ready for the public to review Thursday, September 15.

"The plan is the result of work over the past seven months or so, and we certainly appreciate all of the efforts put into this by the persons who attended the meetings and everyone else who participated," Datta said.

The county started working on the plan in January. A citizen Steering Committee, established to guide the plan development, included the local emergency planning committee, members of the fire departments, local businesses, town and county government, schools, law enforcement, and others. The purpose of the plan is to identify what can be done in advance to lessen the impacts of disasters. Disasters of most concern to those who participated were flooding of Beaver Creek, drought, orated comments, the plans will go winter storms, wildfire, hazardous materials, and wind and tornadoes.

Fortunately with the exception of the long-term drought, Wibaux County has largely avoided any natural county and town not only to compete

plan has been developed.

"Projects, such as the ones to develop a flood warning system and an evacuation plan for the town of Wibaux in the event of a hazardous material accident will hopefully reduce damage or injury in the future," stated plan contractor Barb Beck.

These projects and others are identified in the draft plan which will make them eligible to compete for state and federal funds.

Copies of the draft plan will be available at Wibaux Public Library, Wibaux County Clerk & Recorders office, Town of Wibaux Clerk's office, and from DES Coordinator Frank Datta.

The County will accept comments until Friday, October 14. You can present comments in any form by submitting them to Frank Datta at 796-2218. Or e-mail them, to wibaux @midrivers.com

"Once we've received and incorpto the county commissioners and town council and mayor for adoption," commented Datta.

Completing the plan will allow the

will also allow the county to be eligible for post-disaster relief if something happens in the future.

The Wibaux Pioneer-Gazette, September 8, 2005

## **Draft community Wildfire Protection** Plan ready for review this Thursday

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### Disaster plan comments taken through October 14

Wibaux County will accept public comment on the draft of its Community Wildfire Protection and Pre-Disaster Mitigation Plan until Friday, October 14.

Local residents can present comments in any form by submitting them to Wibaux County Disaster and Emergency Services Coordinator Frank Datta at 796-2218 or e-mailing them to wibaux@midrivers.com.

Draft plan copies are available at Wibaux Public Library, Wibaux County Clerk & Recorder's office, Town of Wibaux Clerk's office, and from DES Coordinator Frank Datta.

The Wibaux Pioneer-Gazette, October 6, 2005

#### **Chapter III: Hazard Evaluation and Risk Assessment**

#### Methodology

Information on natural hazards in Wibaux County was obtained from a number of sources. At the project kick-off meeting in January, the County Commissioners, County DES Coordinator, and the DES District IV Representative were queried about past disasters. Existing county histories and weather data provided to the contractor at that time were reviewed for references to past disasters. Historical literature was researched at the Wibaux Public Library.

At the first Steering Committee/Public meeting held in February 2005, participants were asked to recall past natural disasters. These are documented in the meeting notes included in Chapter II and in part form the basis for the hazards that are profiled in depth below.

Both public and private individuals with knowledge of a particular hazard, infrastructure, asset, or asset value were contacted with specific information requests. These included among others, the town clerk, local insurance agents, the DES Coordinator, the Montana Department of Revenue, the school superintendent, public health nurse, the nursing home administrator, local utilities, the Chair of the Wibaux Conservation District, the Natural Resources Conservation Service, and the Farm Service Agency.

Numerous state and federal data bases were searched including those of the U.S. Department of Transportation, Bureau of Land Management, National Weather Service, U.S. Department of Agriculture (USDA), and the Federal Emergency Management Agency (FEMA.) Existing and on-line maps for such things as wind events, drought status, and floodplains were consulted.

Finally, state and federal plans including the Montana Multi-Hazard Mitigation Plan, the Montana Drought Response Plan, and the USDA Soil Survey of Wibaux County were reviewed. The information obtained from all of these sources is included in the hazard profiles that follow. Each of the hazards identified by the Steering Committee at the public meeting is treated below with the wildland fire hazard addressed in Chapter V.

Table 3.1 Wibaux County Hazards

11	Table 3.1 Wibaux C		Dante
Hazard	How Identified	Why Identified	Rank at Public Meeting
Drought	Steering Committee/ Public Meeting, State of Montana and USDA Disaster Declarations, Montana Drought Response Plan	Much of the land use in the county is agricultural. The county has been in a long-term drought.	1
Transportation Hazmat Incident	Steering Committee/ Public Meeting, County Commission,	Consequences could be severe. BNSF tracks pass through Town of Wibaux. I-94 passes through county.	1
Beaver Creek Flooding	Steering Committee/ Public Meeting, County Commission, Town of Wibaux, Wibaux historical publications, Wibaux Pioneer-Gazette, Western Regional Climate Data	Beaver Creek produced a disastrous flood in 1929. Lives were lost. Town was inundated. Wibaux is situated in the 500-year floodplain of Beaver Creek.	3
Winter Storm	Steering Committee/ Public Meeting, County Commission, Montana and USDA Disaster Declarations, Western Regional Climate Data, SHELDUS	Severe historic winter storms.	Not ranked
Wildfire	Steering Committee/ Public Meeting, County Commission, USDA Disaster Declarations, Western Regional Climate Data	Flashy fuels, high winds, and large historic fires.	Not ranked
Tornadoes, wind events	Steering Committee/ Public Meeting, USDA Disaster Declarations, Western Regional Climate Data, SHELDUS	Violent summer thunderstorms, historic wind, hail, and tornados and corresponding losses.	Not ranked

#### **Hazard Profiles**

Hazard profiles are provided below for each of the hazards--natural and other-identified by the Steering Committee or public at the first meeting. The hazards addressed here include drought, transportation-related hazardous material spills, flooding of Beaver Creek, winter storms, and wind events. The wildfire hazard (and mitigation for this hazard) is addressed in Chapter V. of this document.

The discussions of each hazard begin with a brief introduction. This is followed by historic occurrences of the hazard and a potential loss estimate for a disaster from that particular hazard. The potential loss sections also address vulnerability to each hazard.

#### **Drought Hazard**

"Drought is an extended period of below normal precipitation which causes damage to crops and other ground cover; diminishes natural stream flow, depletes soil and subsoil moisture, and because of these effects causes social, environmental, and economic impacts." (Montana Drought Response Plan, 1995.) Drought is a normal recurrent feature of climate. (The Governor's Report on Drought in Montana, May 2004) Long-term drought affects soil moisture and thus productivity, reservoir storage, surface water, groundwater, and fuel moisture. At this time, all of Wibaux County and Montana remain in an ongoing drought.

#### Historic Occurrences

"Farming in Wibaux County is pleasant and profitable." This statement was made by the Wibaux County Development League in their Beaver Valley Montana brochure published ca. 1915. Unfortunately for producers in the county, the precipitation picture changed shortly thereafter, affecting both how pleasant and profitable it has been to farm in Wibaux County.

According to *Trails Along Beaver Creek* (1976), the drought of 1919 started in northern Montana and extended to eastern Montana. This drought lasted for five years. "Grasshoppers came in black clouds, devouring crops as they moved in blankets across fields. Winds swept across the plains with unbelievable persistency. The rain refused to come and the hot sun baked the earth. Things were grim and money was needed to buy seed grains, for the homesteaders' money was gone." The book's author, Jones, went on to report that more than 11,000 farms were abandoned in eastern Montana in the late teens and early twenties.

Legendary drought occurred again in eastern Montana in the 1930's. "The oldest settlers could not remember a drought worse than the cycle that began in Wibaux in 1929, continuing for nearly ten years with a little relief in 1930 and 1933."

(Along Beaver Trails) In 1934, the government purchased cattle to keep them from starving. The cattle were taken to the stockyards, shot and buried. There were dust blizzards, unceasing winds, and hoppers that came in hordes. The Wibaux County Diamond Jubilee and Montana Centennial 1989 reported that Wibaux County received only 3.75 inches of rain in 1934 and 3.71 inches of rain in 1936. On July 2, 1938 "Hordes of grasshoppers flew in and destroyed one of the best crop prospects Wibaux County ever had."

Impacts were severe not just across Montana, but the entire Great Plains. Changes in farm practices resulted. These changes have lessened the impacts of subsequent droughts, such as the one in the 1950's. The current drought is being compared to that of the 1930's in severity.

According to the 1995 Montana Drought Response Plan "From 1976 to the present, Montana has endured a period largely characterized by years of below average precipitation, punctuated by the extremely dry years of 1977, 1987-1988, 1992, and 1994." *The Governor's Report on Drought in Montana, 2004,* reports that the state has experienced widespread drought eight of the past 12 years. Those years were 1992, 1994, 1996, 1999, 2000, 2001, 2002, and 2003. The year 2004 was also a year of continuing drought.

The state of Montana declared disasters due to grasshopper infestations in Wibaux County in 1985 and 1986 for damages of approximately \$40,000 and \$45,000 respectively.

Table 3.2 Dro	ught and Rela	<u>ted Disaster D</u>	Declaration Summary 1998-2004
Designation	Date	Date of	Type of Disaster
Number	Designated	Occurrence	
S1183	1/14/98	5/1/1997- 10/31/1997	Damages and losses caused by flooding, excessive precip, serious drought, severe heat, insect perils, disease, hail, and damaging wind.
S1281	1/21/1999	5/1/1998- 12/10/1998	Damages and losses caused by flooding, excessive precipitation, serious drought, severe heat, insect perils, disease, hail, and damaging wind.
N647	12/22/1999	10/31/1999 continuing	Damages and losses caused by excessive winds and fire
S1468	9/14/2000	10/1/1999	Losses caused by drought and excessive heat, amended to include hail grasshoppers, high winds, and disease 10/1/1999-9/19/2000, and grasshoppers 8/1/2000-8/30/2000
M1340 Amendment	9/19/2000	7/13/2000- 9/25/2000	Losses caused by wildfires
S1473	9/25/2000	4/1/2000	Losses caused by wind, severe storm, excessive precipitation, ground saturation, tornadoes, severe heat during growing season, insect perils, disease, and drought
S1538	5/29/2001	1/1/2001 continuing	Losses caused by ongoing drought
S1624	3/27/2002	1/1/2002	Losses caused by drought
S1677	10/24/2002	4/1/2002 continuing	Drought, fire, insects, above and below normal temperatures, frost, severe storms, hail, flooding, wind and crop disease
S1849	12/2/2003	1/1/2003 continuing	Losses caused by drought
S1850	12/2/2003	1/1/2003 continuing	Losses caused by flooding, ground saturation, storms, winds, tornadoes, high humidity, dry conditions, and severe temperatures
S1916	4/23/2004	1/1/2003	Losses caused by drought
S1940	8/10/2004	1/1/2004	Losses caused by drought, late season frost, high winds, flooding, ground saturation, storms, ice, snow, and severe temperatures

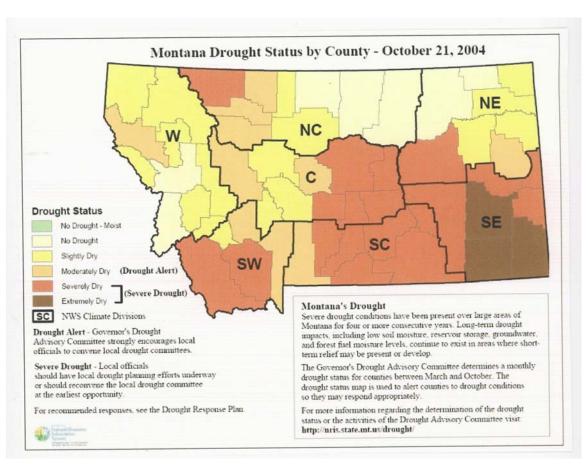
Source: Farm Home Administration

#### Vulnerability and Potential Loss Estimate

There are six possible classifications for degree of drought in the system used by the state of Montana.

- 1. No drought-moist
- 2. No drought
- 3. Slightly dry
- 4. Moderately dry
- 5. Severely dry
- 6. Extremely dry

As of October 2004, Wibaux County was classified as severely dry. Based upon historic and recent drought and drought disaster declarations, Wibaux County is vulnerable to experiencing drought. Drought conditions and vulnerability cover the entire county affecting all residents, the county, and the town of Wibaux.



Drought has both direct and indirect effects. Drought adversely affects soil and vegetation moisture which in turn directly affects crops. Surface water and groundwater are affected which can reduce or eliminate well flows. Finally, drought affects the probability and severity of wildfire and insect damage. "Cumulative years of drought have a multiplier effect... Livestock producers have not truly restocked since wholesale liquidation in 2001 and 2002, when over 350,000 head were sold and/or moved out of state." (*The Governor's Report on Drought in Montana*, May 2004)

According to the Montana Agricultural Statistics, Wibaux had 215 farm/ranch operations in 2002. The county ranked 46th for total cash receipts and government payments of Montana Counties with receipts totaling \$13,504,000. Wibaux County ranked 5<sup>th</sup> in the state in the production of oats and 7<sup>th</sup> in production of durum wheat. The county also produces spring and winter wheat, hay, barley, canola, safflower, mustard, and dry peas. The majority of cropped acreage in the county is non-irrigated. As of January 1, 2004, the county ranked 42nd in the state for all cattle and calves at 21,000 head.

Anecdotally, it appears that most producers in the county have sold off at least 10% of their herds. Many have recently sold off between 10 and 25% of their herds and although not common, a few producers have sold off 50% or more of their beef cattle. (Wibaux County-USDA NRCS, Wibaux Conservation District)

The Farm Services Agency reported that it paid out \$382,178 to county producers in 2003 for grazing losses from drought in 2002. (Wibaux FSA, February 10, 2005) FSA also reported that some producers were taking reduced payments for their lands in the Conservation Reserve Program (CRP) so that they could graze those lands.

**Table 3.3 Cattle Drought Loss Estimation** 

Commodity	2001	2002	2003	2004	20% reduction of average # 2001-2004	Value of reduction
Cattle and calves	17,550	17,255	17,710	16,804	3,466	\$284,905

Sources: Montana Department of Revenue State Report for Property Class 6, Montana Agricultural Statistics: Montana Marketing Year Average for Prices Received for Selected Commodities, 2003 (Cattle and calves + 9 months, \$82.20 Cwt) Billings Livestock, Public Auction Yard weight estimates: 1000 lbs/cow,

Notes: Livestock became exempt from tax in 2003. In addition to drought, decisions on herd management are made based upon prices. Some cattle may have been pastured and thus counted, out of county during the driest years.

Wheat and oats are the primary cash crops in the county. Drought yield reduction estimates for these two crops are provided in the table below.

Table 3.4 Drought Loss Estimation Table for Wheat and Oats

Description	Typical	Reduction in	Average Cost	Number	Economic
	yield	yield	per bushel	of acres	loss
All wheat	35-38	up to 8	\$3.73	34,870	\$1,040,520
	bu/acre	bu/acre			
Oats	85-90	5 bu/acre	\$ 1.70	4,2000	\$ 35,700
	bu/acre				
					\$1,0762,208

Sources: Montana Agricultural Statistics (Montana Marketing Year Average for Prices Received for Selected Commodities, 2003), Wibaux County FSA reports on acres-2003, Wibaux County NRCS. Note: Out of 40,000 acres of wheat planted in 2003, 4050 acres of wheat were grazed and 1080 acres of wheat were cut for forage.

In addition to these losses, the county experienced losses in other specialty crops. The safflower yield was off 16% (1000 lbs/acre rather than typical 1200 lbs/acre.) The yield of peas was off 16% (30 bu/acre rather than typical 36 bu/acre), and yields for lentils were off 30% (700 lbs/acre rather than typical 1,000 lbs/acre.) (USDA, NRCS, 3/16/2005)

Although the economy of the county is highly-dependent on agriculture, the county has always been dry. The drought is already causing an economic impact in the millions of dollars annually, a large sum for a county the size and population of Wibaux County.

#### Flood Hazard

The majority of Wibaux County is quite dry. However, there are significant built assets located in the floodplain of Beaver Creek, specifically, much of the town of Wibaux. FEMA conducted a floodplain study in the mid 1980's. The study was later revised. According to the revised floodplain study dated 1998, "flooding in the town of Wibaux and Wibaux County is due primarily to overflow of Beaver Creek." The floodplain of Beaver Creek and its tributaries Little Beaver, East Beaver, Hay, and Yates Creeks have been mapped. The approximately .4 miles of floodplain of the Yellowstone River along the northeastern boundary of the county have also been mapped, but no assets in Wibaux County are in danger.

#### Historic Occurrences

The most well-known and catastrophic flood to have occurred in Wibaux County happened on June 7, 1929. The Wibaux flood as it is known was caused by a sudden down pour south of town that caused Beaver Creek to overflow its banks and inundate the town. According to *Trails Along Beaver Creek* (1976) "A terrific storm began down Beaver Valley about 30 miles south and west and arrived at town about 7 a.m. on June 7, 1929." Farms were underwater for a distance of two or three miles on each side of Beaver Creek and the water reportedly rose to a height of 10-12 feet in the buildings in the business district. Three individuals

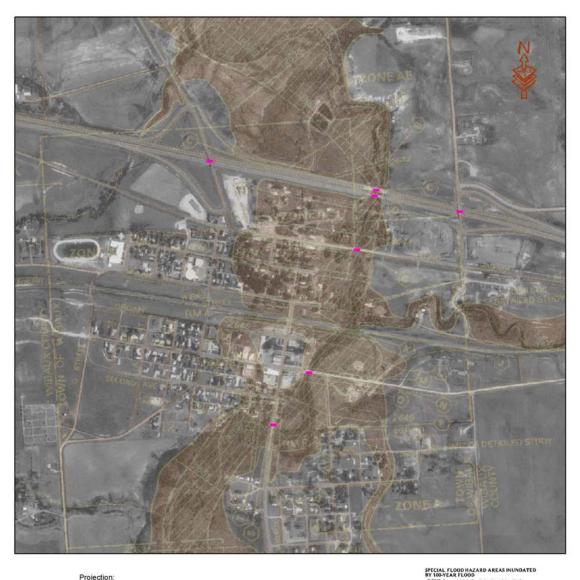
lost their lives in the flood for which people had little warning. The Reverend and Mrs. Sifert were carried away in their home and an elderly man was also drowned. The Wibaux County Flood Insurance Study (1998) reported that the volume of the 1929 flood was 30,000 cubic feet pr second. According to the Diamond Jubilee publication, "The flood waters necessitated inoculations against disease, and sightseers provided a crowd control problem."

In addition to the flood of 1929, a flood of similar magnitude reportedly occurred in 1882 (Flood Insurance Study, 1989.) And in June of 1921, Beaver Creek flooded with a volume approximated to be 10,000 cfs. The flood insurance study concluded that flood recurrence was 500 and 40 years based on these two events.

Thirty-eight years of peak-discharge records from USGS Gauging Station 06336500 at Wibaux were available when the flood insurance study was revised in 1998. Hydrologic and hydraulic analyses were performed. The 100 and 500-year floodplain boundaries are shown on the Flood Insurance Rate Map. The floodway limits for Beaver Creek were determined through a trial and error process according to the flood insurance study.

Six floods are reported in the National Climate Data Center (NCDC) data base for Wibaux County from 1/1/1950 to 11/30/2004. These floods occurred in1996, 1998,1999, 2002, 2003, and 2004. The SHELDUS data base reports flooding in 1969, 1971, 1972, 1986, 1990, 1991, and 1994.

The U.S. Department of Agriculture declared a disaster for Wibaux County on January 14, 1988 for "damages and losses caused by flooding..." for the incidence period May 1, 1997 through October 31, 1997. USDA declared another disaster for the county on December 6, 1999 for the incidence period of September 1, 1999 through October 31, 1999 for severe storms, flooding and other hazards. Wibaux County was included in USDA disaster declarations for flooding again on July 3 and August 7, 2001, August 2, 2002, December 2, 2003, and August 10, 2004. Not all of the flooding was due to Beaver Creek.



Projection: State Plane Montana FIPS 2500 NAD83, in meters December 2005

Data Source:
Natural Resource Information System
\*Digital Orthophoto Quadrangles for Montana
FEMA
\*FIRM Map tiff Image
Montana DES
\*Bridges

This map was created for fire and disaster planning only. Neither the county or the contractor will be responsible for any data inaccuracies associated herein.

### Wibaux Montana FIRM Flood Map

BY 100-YEAR FLOOD

ZONE AN beas filed directions determined,
ZONE AN beas filed directions determined,
ZONE AN Flood depth of 1 to 3 feet (usually areas of produced and to 1 to 5 feet (usually areas of the control of allowed by the control of the

OTHER FLOOD AREA

X Areas of 500-year flood; areas of 100-year flood with average depth of less than 1 foot or with drainag areas less than 1 square mile; an areas protected by levees from 100

#### Vulnerability and Potential Loss Estimate

Although the NCDC reports six floods for the county, the only flood for which the NCDC contains damage information is the 2002 flash flood at Wibaux. The damages were listed at \$30,000 for that incident. The total reported damage from the floods given in the SHELDUS data base--primarily crop damage--was \$1,284,372. No associated injuries or fatalities were reported. (http://go2.cal.sc.edu/hazard/haz\_utils.county)

The town of Wibaux had 12 policies in force as of December 31, 2003. The total insurance in force at that time was \$288,400. There are no policies listed for areas outside of the town. (FEMA Flood Insurance Program web page)

According to the Montana Department of Revenue (Recap Report by Classification 2004), the total value of residential and commercial improvements in the town of Wibaux is \$5,036,498. Approximately 40% of the town of Wibaux lies within the 100-year floodplain. It is likely that 50% of the value of the assets in town could be at risk, or \$2,518,249. If these structures sustain a loss of half of their value, the direct losses to structures would be \$1,259,125. Direct losses could also occur to infrastructure such as roads, bridges, and utilities. Additional indirect losses could be expected as a result of business interruption and induced damage from debris and clean-up.

A number of the assets identified by the public as critical infrastructure are located within the 100-year and 500-year floodplains of Beaver Creek. The town shop, firehall, the BNSF underpass, both gas stations and the bulk station, the REA warehouse, the sewage lagoon, and the bridge on Highway 7 south of Wibaux are in the 100-year floodplain. The county courthouse, town hall and the grocery store, and the MDU gas border station are within the 500-year floodplain.

Wibaux has experienced flooding in the past and remains vulnerable to flash flooding of Beaver Creek. According to the National Weather Service in Glasgow, flooding of Beaver Creek represents the natural disaster with the greatest potential for damage in Wibaux County. (Frandsen, 3/16/2005)

#### **Transportation Hazardous Material Hazard**

People, goods, and livestock move across Wibaux County in two important transportation corridors, the interstate highway and the railroad.

The Burlington Northern Santa Fe (BNSF) Railroad passes through the center of both the town of Wibaux and Wibaux County, running generally east-west. The BNSF carries coal, grain, and merchandise across the county. According to the Billings office of the BNSF, approximately 26 trains pass through the county on a daily basis.



BNSF overpass located in the town of Wibaux

Interstate 94 also crosses the center of the county running generally east-west. I-94 passes through the county just north of the town of Wibaux. Highway 7 passes through town carrying personal and oil field traffic. Personal and commercial vehicles carrying freight use the interstate.

There are 60,000 identified hazardous materials and at any given time, 45,000 are in transport. (Billings Gazette, February 28, 2005) Railroads carry about 1.7 million carloads of hazardous materials annually. Between 1981 and 2004, there were 10 deaths in the country related to hazardous materials moving by rail and 274 deaths from hazardous material moving by truck. BNSF recorded only one incident where hazardous materials were released in Montana between 1994 and 2004. BNSF officials have real-time information on what hazardous materials each train is carrying. (Billings Gazette, February 28, 2005)

#### Historic Occurrences

The Billings Gazette cited statistics from the Association of American Railroads that 99.9998% of hazardous materials that travel by rail make it safely. (February 28, 2005) But the small percent of hazardous material transport problems can cause serious consequences. For example, in early 2005, a train derailment in South Carolina that produced a cloud of toxic gas from a chlorine leak killed nine people. An April 1996 rail crash in Alberton, Montana, resulted in the second largest chlorine spill in the history of the country. One death and the evacuation of 1,000 people resulted. And, in February 1998, 48 rail cars rolled backward and down grade into Helena. The crash caused an explosion that forced the evacuation of 2,000 people and cost \$6 million.

The Federal Railroad Administration maintains statistics on rail accidents from January 1975 to December 2004. Prior to these statistics being kept, two train wrecks of note occurred in the county. According to the *Wibaux Golden Jubilee* (1961), a train wreck occurred in 1921 east of the depot in Wibaux and another train wreck occurred in 1927 one mile east of Wibaux. No information was available about injuries or damages from these two wrecks.

Between 1975 and 2005, there were accidents caused by equipment, track, human factors, and miscellaneous factors in five different years. The total number of cars derailed in all of the accidents was 20. The total number of locomotives derailed was two. Damage information is given in the table below.

Table 3.5 Wibaux County Train Accidents 1975-2004

Year	Cause	Equip	Track	RR	Cars	Speed
		Damage	Damage	Equip	derailed	Mph
1975	Human	\$ 17,231	0	Cars and	0	10
	Factor			freight		
				train		
1977	Track	\$ 2000	\$ 4200	Freight	0	15
				train		
1979	Equipmt	\$304,700	\$46,000	Freight	18 cars	35
				train	2 locomo.	
1980	Misc	\$ 4,719	0	Freight	0	50
				train		
2001	Equipmt	\$15,000	\$ 500	Freight	2	25
				train		

Source: Federal Rail Administration (http://safetydata.fra.dot.gov)

#### Vulnerability and Potential Loss Estimate

A variety of hazardous materials are transported across the county on both the interstate highway and the railroad tracks. Of particular concern from the standpoint of a hazardous materials accident is the proximity of both the interstate and train tracks to the town of Wibaux and major population concentration in the county. The railroad tracks run through town and immediately adjacent to both schools. The railroad has an excellent safety record with respect to hazardous material transport through the county over the past 30 years. However, an accident remains a possibility, and the possibility is one which concerns town and county residents. Based on the past, a truck accident on I-94 is statistically more probable than a rail accident.

Although a hazardous material incident could occur anywhere in the county along the interstate or railroad tracks, the primary vulnerability is an incident that would directly affect the town of Wibaux. Neither the town nor the county has an evacuation plan in place for an incident of this type.

Direct economic impacts associated with a small scale--not a worst case scenario--hazardous material vehicle incident on I-94, near the town of Wibaux could include the following.

Table 3.6 Direct Loss Estimate for Hazmat Incident

Impact	Comments	Cost
Hazardous material	Hazmat Team for containment and	\$ 30,000
cleanup	clean-up	
	Hazmat vehicle @ \$150/hr x 48 hr	
	6-person Pod @ \$300/hr x 48 hr	
	Suits 6 x \$1000	
	Fuel	
Security,	Fire Department, Sheriff, MHP are	\$ 15,000
evacuations, and	involved in Initial assessment,	
traffic control	barricading and securing the area,	
	diverting traffic, and conducting	
	evacuations (10 employees for 48	
	hours @ \$25/hr plus fuel)	
Medical	2 people treated for skin irritations,	\$ 1,000
	4 people checked for respiratory	
	exposure	
Sheltering	500 people for 24 hours	\$ 18,000
	TOTAL COST	\$ 64,000

Sources: Paul Gerber (Billings Hazmat Team), approximation from information provided by Linda Shicktanz (American Red Cross)

Added economic impacts could result from business interruption, long-term impacts to soil and water, long-term health consequences to exposed individuals or livestock, and additional clean-up costs.

#### Wildfire Hazard

The wildfire hazard is addressed in detail in Chapter V. Chapter V assesses the hazard and risks, and provides the mitigation goals, objectives, and actions. A wildland fire hazard could occur anywhere in the county outside of the town or in the grassy areas at the edges of town.

#### **Wind Event Hazard**

Wind events can and do occur during any season of the year in Wibaux County. Damaging winds come in the form of winter storms, thunderstorms, tornadoes, microbursts, and hail. Historical data indicate that the county experiences high winds pretty much every year. Depending on the timing, duration, and form of the wind event, damages vary greatly. Wind events are the most frequently-occurring natural hazard in the county.

#### **Historic Occurrences**

Wind has generated some excitement in the county in years past. The Diamond Jubilee (1989) reported on an event that occurred in June of 1916, "A storm blew over the wagon of a traveling circus, killing one of the circus men, and freeing three ostriches from their cages. Wibaux cowboys chased down and roped two of the ostriches and returned them to the circus. One ostrich ran through a barbed wire fence and was killed."

According to the National Climate Data Center, six tornadoes were reported in Wibaux County between 1/1/1950 and 9/30/04. The tornadoes occurred in 1952, 1953, 1979, 1991 (2), and 1996. The tornado project has these same records plus one tornado in 1946. The tornado report covers the years 1880 to 2000.

Also according to the NCDC, there were 53 hail events in the county between 1/1/1950 and 12/31/2004. Although no hail storms were reported in some years, several years experienced many hail events. One local insurance agent recalled a hail storm in July of 1969 that cut a 20-mile swath and caused stock fatalities and property damage. He reported that his firm receives an average of 8-10 hail and wind claims per year from within the county. (Personal conversation, February 10, 2005)

Thirty-six thunderstorm and high wind events were reported to the NCDC in the county from 1/1/1950 through 9/30/2004. Wind speeds reached as high as 81 knots, but were more typically between 50 and 65 knots (nautical miles per hour.) SHELDUS data contain records for 30 wind events beginning in 1961.

On July 11, 2004, severe winds hit Wibaux County. Leon Setera reported a gust of 85 mph and speculation exists that there were also tornados in the area. Setera lost half the roof on his shop, the roof on a shed and 100 feet of windbreak. Other damages included broken windows, power poles, trees, barns, and grain bins. Hail also accompanied the storm in some locations.

#### Vulnerability and Potential Loss Estimate

Despite the fact that numerous high wind and hail events have been documented in the history of the county, there is scant information on damages.

The total damage reported from the six tornadoes in the NCDC was \$278,000, with most of that, \$250,000, occurring during one event in 1952. Damage information is provided for only two of the 53 hail events in the NCDC data base. The damages reported for the event on 8/21/93 were \$50,000, and damages were \$100,000 for the hail storm that occurred on 6/8/2002. NCDC damage information for thunderstorm and high wind events is available for only two of the

36 events. The April 5, 2000 high wind of 61 knots caused \$84,000 in damages and the July 11, 2004 thunderstorm wind of 74 knots caused \$100,000 damage. Some additional damage information is contained in the SHELDUS data. This damage information indicates that crop damage has exceeded property damage from wind and hail events in the county in the past.

Potential losses from wind events can come from damage to structures, crops and landscaping, utility poles and lines, equipment, and injuries. Winds also steal moisture and drive wildland fires. Although wind events are probably the most frequent natural hazard in the county, losses from wind events--with the exception of large scale crop damage--are generally more isolated and less costly than other natural hazards such as flooding, wildfires, and winter storms. Wind events can occur anywhere in the county.

#### Winter Storm Hazard

Blizzards and ice storms occur with relative frequency in Wibaux County. A blizzard is defined as a storm with winds over 35 miles per hour with snow and blowing snow reducing visibility to near zero. Blizzards and ice storms pose a great threat to human life, livestock, and wildlife in the county, and in Montana. Winter storms can cause injury and death to occur from hypothermia, vehicle accidents, and over-exertion. Rapid snowfall, extremely low temperatures, and/or strong winds that cause blowing and drifting snow can combine to present especially dangerous conditions.

#### Historic Occurrences

In *Pioneering in Montana*, cattleman Granville Stuart reported that "In the fall of 1886 there were more than one million head of cattle on the Montana ranges and the losses in the "big storm" amounted to \$20 million. This was the death knell to the range cattle business on anything like the scale it had been run on before." "In the spring of 1887 the streams and coulees everywhere were strewn with the carcasses of dead cattle." According to the Wibaux Diamond Jubilee, the winter of 1886-87 was one of the hardest winters on record. While 80-85% of many ranchers' herds on the open range were wiped out, Pierre Wibaux suffered considerably less loss because of available hay and protection.

The SHELDUS data base contains 17 records of winter weather events for the county from 1971 to 2004. These events occurred in 1971, 1973, 1975, 1978, 1984, 1989, 1990, 1991, 1992, 1994, 1997, 1998, and 2000.

The data from the National Climate Data Center (NCDC) contained 18 records of blizzards, winter storms, heavy snow, and extreme windchill for the years 1950 through September 30, 2004. The winter events occurred in 1996, 1997, 1998, 1999, 2000, 2002, 2003, and 2004. The recent years for winter storms in this

data suggests that the number of winter storms were not reported with the same diligence in earlier years as they have been in more recent years.

#### Vulnerability and Potential Loss Estimate

The state of Montana has declared disasters for winter storms in Wibaux County on two occasions since 1975. Disasters were declared for the county due to winter storms in 1978 and 1979. The damages were \$66,718 in 1978, and \$55,209 in 1979. (State Declarations 1975 to present, Montana Disaster and Emergency Services)

The USDA declared Wibaux County a disaster for "severe storms, flooding, snow, ice, etc" for the period March 1, 1999, through August 18, 1999. The USDA again declared a disaster for the county in 2000, due to "damages and losses caused by severe winter storms" for the period October 31, 2000, through November 20, 2000. Late season frost was among the causes listed for the third and most recent USDA disaster declaration for the county, for the incidence period of January 2004. (Montana FSA Disaster Declaration Summary)

The only past winter storm event for which damage estimates are provided in the NCDC data is the storm of November 1, 2000. This storm caused an estimated \$3.3 million dollars of damage. The damages resulting from the 17 storm events listed in the SHELDUS data base totaled more than \$1 million with a lesser amount of crop damage also reported.

Damages from winter storm events can include direct costs associated with snow removal and sanding; snow and wind damage to structures, crops, and landscaping; vehicle accidents; and damage to utility lines. In addition to these costs, there would likely be medical expenses (from slips and falls, over-exertion, and/or hypothermia) and extra salary expenses for local and state public works and law enforcement personnel. If an event is particularly severe and long-lasting there could be livestock losses as well.

The county remains vulnerable to winter storms due to the continental weather patterns. The extent of impact or damage will vary with major winter storm events dependent upon the amount and moisture content of snow, wind speeds, temperatures, and the duration of the event.

What is apparent from the data on past winter storms is that severe winter storms are frequent occurrences in Wibaux County, and can occur one or more times in any given year in any place in the county or county-wide. Wibaux County residents know to expect storms and know how to respond when storms occur. This is evidenced by the lack of injury and death associated with past winter storms.

#### **Wibaux County Vulnerability**

The following list of existing critical facilities was developed by the Steering Committee and the public at the public meeting held in Wibaux on February 10, 2005. Specific utility assets were added after speaking with company representatives. No new construction is proposed.

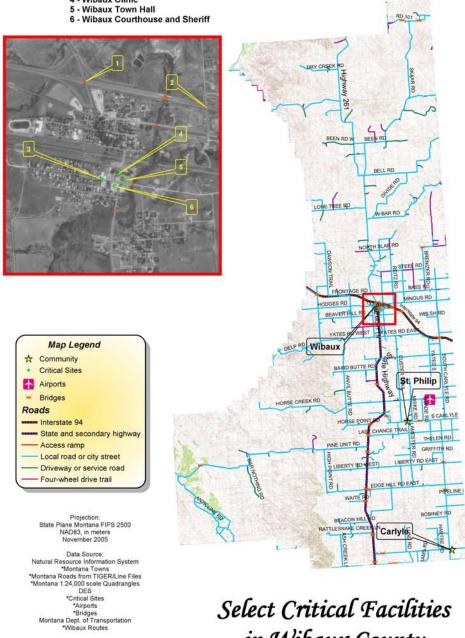
**Table 3.7 Wibaux County Critical Facilities** 

Table 3.7 Wibaux County Chicai Facilities						
Year Built	Value					
	\$ 500,000					
1953	\$ 1,294,493					
	\$ 49,855					
	\$ 111,392					
Various	\$ 51,200					
2004	\$ 366,990 (structure)					
	\$ 121,000 (contents)					
	\$ 567,000					
	\$ 1,020,600					
	\$ 60,000					
	\$ 80,000					
	\$ 250,000					
	\$ 700,000					
1975	\$ 2,182,000 (structure)					
	\$ 205, 000 (contents)					
	\$ 171,732					
1956,1979	\$ 2, 250,000 (est CRV)					
1973-2002	\$ 3,000,000					
	Year Built  1953  Various  2004  1975  1956,1979					

Sources: MDT-Ed Bach, David Crumley, Town of Wibaux-Ginny Archdale, Nursing Home-Maureen Brophy, AIM-Bill Franks, TAB Electronics-Bob Brenner, Goldenwest Electric Coop-Dale Evans, MDU-Steve Merrill, Misc-Frank Datta



- 1 West I-94 Interchange
- 2 East I-94 Interchange
- 3 Wibaux Fire Dept.
- 4 Wibaux Clinic



Select Critical Facilities in Wibaux County

This map was created for fire and disaster planning only. Neither the county or the contractor will be responsible for any data inaccuracies associated herein.



Wibaux Town Hall

The following list of vulnerable populations was developed by the Steering Committee and the public at the public meeting held in Wibaux on February 10, 2005.

**Table 3.8 Wibaux County Vulnerable Populations** 

Name	Location	Census
Home daycare	Various	25-30
Nursing Home	Hwy 7, S of Wibaux	40 licensed beds
Wibaux Elementary	Wibaux	75
Schools		
Wibaux High School	Wibaux	83

Sources: Public Health-Barb Maus, Wibaux School District-Kirby Eisenhauer, Nursing Home-Maureen Brophy

Stranded motorists and individual elderly residents were also identified as vulnerable populations. Since these two groups of people are not found in one location, they are not included in the table above.

#### References

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Billings Gazette, February 28, 2005

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Brenner, Bob, TAB Electronics, Glendive

Brophy, Maureen, Wibaux County Nursing Home

Crumley, David, Montana Department of Transportation

Datta, Frank, Wibaux County Disaster and Emergency Services Coordinator

Eisenhauer, Kirby, Wibaux Public Schools

Evans, Dale, Golden West Electric Cooperative

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Stuart, Granville, Pioneering in Montana.

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USDA, Natural Resources Conservation Service

USDA, Soil Conservation Service, Soil Survey, Wibaux County Montana, 1958

USDA, Wibaux Conservation District (Jim Kane, Chair)

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U.S.DOT, Federal Rail Administration, http://safetydata.fra.dot.gov

US National Oceanic and Atmospheric Administration, National Weather Service, National Climate Data Center

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Wibaux County Diamond Jubilee and Montana Centennial, 1989

Wibaux County Flood Insurance Study, FEMA, 1998

## **Chapter IV. Mitigation Strategy**

The following goals were developed in response to the hazards of most concern in the county. The goal statements were formulated at the public meeting held in Wibaux on April 12, 2005. Some project ideas were identified during the meetings held in February and April and during one-on-one conversations. The remaining projects were added and prioritized at the final planning meeting held in Wibaux on May 10, 2005. A wide range of projects was discussed and the following are the projects local participants were comfortable with.

# GOAL ONE: MITIGATE POTENTIAL LOSS OF LIFE, PROPERTY, AND INFRASTRUCTURE FROM FLOODING OF BEAVER CREEK.

Objective 1. Ensure adequate warning of the public.

- 1.1.1. Develop warning system utilizing existing sirens.
- 1.1.2. Educate citizens about the warning system and what to do in the event of a flood of Beaver Creek.



Fire Hall Siren, Wibaux

Objective 2. Minimize losses.

1.2.1. Back-up irreplaceable town and county records off-site.

Objective 3. Reduce potential for flooding.

1.3.1. Request a study by the Montana Department of Transportation on redesigning and replacing the bridge on Highway 7 south of Wibaux to reduce constriction of the floodway.



Highway 7 Bridge south edge of Wibaux

1.3.2. Determine a location and stockpile a small amount of sand and sand bags. Let all responders know where this location is.

#### GOAL TWO: MANAGE IMPACTS OF SEVERE WINTER STORMS.

Objective 1. Improve quality and timeliness of weather information.

2.1.1 Obtain a weather service repeater for Wibaux.

Objective 2. Be prepared to respond to a winter storm.

- 2.2.1. Obtain generator(s) to provide back-up power to run the water well pumps, power the school, firehall, and courthouse.
- 2.2.2 Identify shelter locations and develop shelter agreements with the Red Cross.
- 2.2.3 Educate citizens about how to prepare for a winter storm and what to do during a winter storm.

#### GOAL THREE: MANAGE IMPACTS OF LONG-TERM DROUGHT.

Objective 1. Provide tools and education for producers.

3.1.1. Continue to offer periodic seminars on drought management crop and livestock options.

Objective 2. Be prepared to respond to wildland fire incidents.

3.2.1. To the extent possible, fill vacancies in department, maintain equipment, administer pack test, and provide wildland fire training to volunteers.

#### GOAL FOUR: MINIMIZE THE IMPACT OF HAZMAT INCIDENTS.

Objective 1. Be prepared to respond in the event of a hazmat incident.

- 4.1.1. Request a list of the top 25 hazardous materials being transported through the county by rail from BNSF.
- 4.1.2. Develop an evacuation plan for the town of Wibaux.
- 4.1.3. Educate residents about what to do in the event of a hazardous material spill or leak.
- 4.1.4. Continue to provide hazardous material incident training for responders.



Setera Barn following wind event, 2004

## GOAL FIVE: REDUCE THE IMPACTS OF WIND EVENTS.

Objective 1. Be prepared for wind events.

- 5.1.1. Educate the public about what to do during an extreme wind event.
- 5.1.2. Educate the public about the siren warning system.
- 5.1.3. Partner with insurance companies to offer information on building materials and techniques for wind-resistant new construction.

## **Project Ranking and Prioritization**

The mitigation projects were prioritized by the participants at the final planning meeting held on May 10, 2005, in Wibaux. Projects were ranked as high, medium, or low priority. The ranking was done by consensus of the entire group based upon their subjective assessment against the following criteria:

- Number of lives at risk
- Value of property at risk
- Infrastructure at risk
- Risk of business interruption/loss
- Cost/benefit of the project.

Table 4. 1. Mitigation Project Prioritization

	Table 4. 1. Mitigation Project Prioritization						
Project	Project Description	Rank	Potential				
Number			Resources				
ONE	Mitigate potential loss of life, property, and infrastructure from flooding of Beaver Creek.						
1.1.1	Develop flood warning system	Н	DES, Town, County				
1.1.2.	Educate citizens about warning system	Н	DES, Town, County, news paper, schools				
1.2.1	Back-up public records off-site	Н	Town, County				
1.3.1	Study redesign/replacement of Highway 7 bridge south of Wibaux	М	DOT, FEMA				
1.3.2.	Identify a location for storage of sand and sand bags	M	County, DES, DOT				
TWO	Manage impacts of severe winter storms.						
2.1.1.	Obtain a weather service repeater	Н	DES, NWS, County				
2.2.1.	Obtain generator(s)	Н	Town, County, DES, FEMA				
2.2.2.	Identify shelter locations	М	Town, County, DES, Red Cross				
2.2.3	Educate citizens about winter storms	L	DES, news paper, schools				

Project	Project Description	Rank	Potential
Number	- · · · · · · · · · · · · · · · · · · ·		Resources
THREE	Manage impacts of long-term drought		
3.1.1	Continue drought management education	L	County Extension, FSA, NRCS
3.2.1	Maintain preparedness for wildland fire	Н	Fire Department, DNRC, BLM
FOUR	Minimize the impact of hazmat incidents		
4.1.1	Request hazmat list from BNSF	Н	Town, County, Fire Department, BNSF
4.1.2.	Develop an evacuation plan for Wibaux	Н	Town, County, DES, Red Cross
4.1.3.	Educate citizens on hazmat	М	DES, Town, County, schools
4.1.4.	Continue to provide hazmat training for responders	М	Fire Department, DES, DEQ
FIVE	Reduce the impacts of wind events		
5.1.1.	Educate the public about what to do	L	DES, Town, County, news paper, schools
5.1.2.	Educate the public about the warning system	Н	DES, Town, County, news paper, schools
5.1.3.	Offer information on building materials and practices	L	Insurance companies, DES

### **Project Implementation**

The projects listed above are the means by which the county and town intend to realize the goals to become more disaster resistant. Accomplishing the projects will be dependent on funding, staff, and technical resources from a variety of sources including the town, county, state and federal government, not-for-profits, and businesses.

Some of the projects can be undertaken by the county within existing resources. One example of this would be to identify shelter locations in cooperation with the American Red Cross. Another project of this type is to determine a location and stockpile a small amount of sand and sand bags for flood emergencies.

Some of the projects can be completed by the county with additional funding. The amount of funding needed depends on the project. An example of this type of project would be obtaining a back-up generator for the town of Wibaux so that the water system can be operated for fire fighting and/or residents' needs during a power outage.

Some of the projects will require a public-private partnership to accomplish. An example of this would be obtaining a list of hazardous materials shipped through the county on the Burlington Northern Santa Fe Railroad and preparing an evacuation plan for the town in the event of a hazardous material spill.

Some projects may require expertise not available in the county. For example, a study of the bridge on Highway 7 south of Wibaux to see what might be done about the floodway constriction will require engineering expertise, most likely obtained from the Montana Department of Transportation.

Projects will be accomplished as resources, either at the local, state, or federal levels, become available. Implementation of the plan will be the responsibility of the LEPC and the Wibaux County Disaster and Emergency Services Coordinator acting on behalf of the town of Wibaux and Wibaux County. Plan implementation also depends on the willingness of private (BNSF) and the Wibaux Pioneer-Gazette, and not-for-profit organizations (American Red Cross) to participate in specific mitigation actions and projects.

In selecting projects to compete for funding whether it be existing internal funding or funding from state and federal sources, emphasis should be placed on the relative benefits compared to the cost of the project. Criteria such as number of people educated or protected and the dollar value of assets mitigated from potential hazards should be considered and weighed. Where possible a basic cost benefit and/or value analyses should be completed during the planning of the project.

The county and town understand that while completion of the plan will make them eligible to compete for additional funds, it is in the best interests of the local jurisdictions and residents to proceed with those projects that can be done within existing resources while exploring avenues to obtain assistance for the projects beyond local capabilities.

Table 4.2 Wibaux County-Mitigation Project Cost/Benefit Review

#	Description	Benefits	Estimated Cost*	Schedule
1.1.1	Develop flood warning system	Save lives, prevent injury, save property	Medium	1-2 yrs
1.1.2	Educate citizens about flood warning system	Save lives, prevent injury, save property	Low	3-5 yrs
1.2.1	Back-up public records off-site	Save records, prevent business interruption	Medium	1-2 yrs
1.3.1	Redesign of Hwy 7 bridge	Save property, prevent business interruption	High	3-5 years
1.3.2	Sand bag storage	Save property	Low	1-2 yrs

#	Description	Benefits	Estimated Cost*	Schedule
2.2.1	Obtain weather service repeater	Save lives, prevent injury, save livestock, prevent business interruption	Medium	1-2 yrs
2.2.1	Obtain generators	Save lives	Medium	1-2 yrs
2.2.2	Identify shelter locations	Save lives, prevent injury	Low	3-5 yrs
2.2.3	Educate citizens about winter storms	Save lives, prevent injury, save livestock	Low	3-5 yrs
3.1.1	Drought management education	Prevent business interruption	Low	Ongoing
3.2.1	Maintain wildfire preparedness	Save lives, save livestock, save property, prevent business interruption	Low	Ongoing
4.1.1	Request hazmat list from BNSF	Save lives, prevent injury and business interruption	Low	1-2 yrs
4.1.2	Develop an evacuation plan for Wibaux	Save lives, prevent injury	Medium	1-2 yrs
4.1.3	Educate citizens on hazmat	Save lives, prevent injury	Low	3-5 yrs
4.1.4	Hazmat training for first responder	Save lives, prevent injury	Low	Ongoing
5.1.1	Educate citizens about actions in wind events	Save lives, prevent injury	Low	3-5 yrs
5.1.2	Educate citizens about warning system	Save lives, prevent injury	Low	1-2 yrs
5.1.3	Offer information on building materials and practices	Prevent in jury, save property, prevent business interruption	Low	5-7 yrs

Notes: For potential project funders see "potential resources" column in Table 4.1. on pages 4-5

<sup>\*</sup>Estimated costs: Low = \$ 10,000 or less, Medium = \$ 10-100,000, High = \$ 100,000 or greater

## Chapter V. Community Wildfire Protection Plan

### **Executive Summary of the Community Assessment**

This Community Wildfire Protection Plan (CWPP) was prepared as a part of Wibaux County's pre-disaster mitigation (PDM) plan to assist the county to be more disaster resistant and better prepared to deal with wildfire when it strikes. The plan was written so that Fire Department and other local government departments can use it as a stand-alone document, even though it is a chapter in the overall pre-disaster mitigation plan. The CWPP portion of the plan is written to meet the intent of the National Fire Plan (NFP) objective to have the communities or as in this case Wibaux County, assess its current situation and then develop and prioritize mitigation actions to address the values at risk. The plan takes the proactive approach of assessing risks and vulnerabilities, then identifying locally supported actions that can be implemented to prevent or eliminate the potential for loss and damage from a natural disaster. This plan meets the requirements for pre-disaster project funding and post-disaster assistance from the Federal Emergency Management Agency.

This CWPP is consistent with the national fire policy expressed in the National Fire Plan. The NFP was developed in August of 2000, "with the intent of actively responding to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future." (<a href="www.fireplan.gov">www.fireplan.gov</a>) The NFP has five key areas: 1) firefighting, 2) rehabilitation, 3) hazardous fuels reduction, 4) community assistance and 5) accountability. Federal agencies like the Bureau of Land Management are directed to assist communities that have been or are at risk from wildfire. The assistance for Wibaux County has come mostly from the Rural Fire Assistance program in the form of funding for planning, training, equipment and education.

Collaboration between the local fire department, DES Coordinator, local governments, Bureau of Land Management, Farm Services Agency and Montana Department of State Lands throughout this effort was key in producing this plan.

Fuel types vary from large stands of grasses, crops such as a hay, wheat, barley, and oats. There is sagebrush to scattered juniper to heavier concentrations of juniper/ponderosa pine in the southwestern part of the county. Fuel loading is light to moderate for most of the county, with the exception of the pine unit in the southwestern portion where fuel loading is much heavier. Wildfire ignitions in Wibaux County are both natural and human-caused. The dry climate coupled with the recent years of drought, wind, flashy fuels, remoteness and ruggedness of the county contribute to the wildfire hazard. Poor access roads and long driving times often slow response times for the fire department.

From the identification of hazards in the risk assessment, a mitigation plan was prepared which includes a strategic plan to decrease the county's risk to losses by wildfire.

### Methodology

This risk assessment and mitigation plan was developed by using the following steps:

Hazards were evaluated as follows:

- 1. Identify hazards that may occur.
  - a. Meetings and discussions conducted by the contractor with community leaders (county commissioners, firemen and county DES Coordinator)
  - b. The first CWPP meeting was facilitated by the contractor with several firemen and the Fire Chief. During this meeting the attendees provided examples of past wildfires and their concerns of the fire hazards in the county.
  - c. A Core Group was identified during that first meeting with the key firemen in the county. This Core Group was established to give the contractor a team of firemen to provide local information about hazards and review the information the contractor was to prepare. They also provided some of the values at risk. After the first meeting a list of wildfire hazards were prepared by the contractor and sent to the Core Group for review and validation to be done at a second meeting.

**Table 5.1 Wibaux County Core Group** 

rabio ori Wibaak County Coro Croap				
Name	Title			
Brian Nelson	Chief of Wibaux Fire			
	Department			
Bruce Smith	Training officer			
Gerald Job	Fireman			

- d. The contractor also facilitated the second CWPP meeting and the priorities for protection were discussed and additional items and locations were added. Subsequent phone conversations with members of the Core Group and County DES Coordinator helped to characterize the county's wildfire issues and fine tune information in the risk assessment.
- e. Researching other plans, websites, reports and newspapers.

#### 2. Prioritize the hazards.

- a. Hazards were given a preliminary priority at the first meeting.
- b. During the second meeting there were additions made to the list and priorities were finalized.

### 3. Profile hazard events.

a. Through discussions with the Core Group and help from the DES Coordinator the most significant concerns for the county surfaced.

Several key areas of higher probability were identified as well as some areas of potential life and property losses.

b. Obtain data on historical fires and their locations.

#### Mitigation Plan

During the preparation of the Mitigation Plan, additional project items were generated from the third meeting of the Steering Group for the PDM and from contractor ideas. During the review of the Mitigation Plan by the CWPP Core Group, DES Coordinator and other interested parties the opportunity was presented for review to add, subtract or modify this plan. Changes in priorities were also validated or rearranged in this review process.

#### Introduction

Two meetings were held with the fire chief and firemen to explain the procedure for the development of the plan and to request their local knowledge. A Core Group of firemen was identified to work with the contractor to assist in the development of the plan.

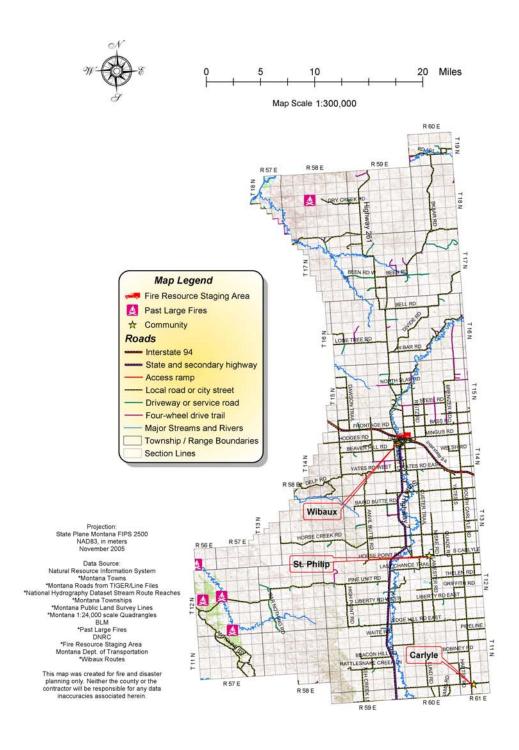
This fire protection plan has two distinct parts, 1) risk assessment and 2) mitigation of those risks. In order to protect the most important assets of a county from wildfire, they must first be identified and then prioritized. From this list the mitigation strategies were formed.

#### Area to be Evaluated

The entire county was evaluated for the risk assessment. Grasslands, badlands and some agricultural lands characterize the county. The highest point in the county is 3360 feet. The Bureau of Land Management has a small presence in the county with 26,033 surface acres of federal land. There are 36,015 acres in the Conservation Reserve Program.

Wibaux is the only true community and the county seat. The other two communities listed in the Communities at Risk were St. Phillip and Carlyle. All of the communities were ranked as moderate risk in the Communities at Risk in the Federal Register (Volume 66, #160, August 17, 2001. According to the county DES Coordinator, Carlyle has just a few homes and St. Phillip has a functioning church and an old dance hall that gets limited use.

For more detailed information about the characteristics of Wibaux County please refer to Chapter I of this plan.



Wibaux County Fire Districts, Resources and Past Large Fires

#### **Historic Occurrences**

During a discussion with the county's firemen they indicated they have a variety of ignition sources, but primarily most of their ignitions come from lightning and farm equipment malfunctions. Information provided by the local firemen indicates that their lightning fires occur scattered throughout most of the county with the storm patterns moving generally from west to east. The Fire Department responds to an average of 20-25 fires per year. The average size is about 15-20 acres. Extrapolating the information from the BLM and the local firemen the probability of a large fire occurring is about once or twice per decade. However in the southwest corner of the county there are some high value oil and gas properties in fuel types that support large fires.

Table 5.2. Fires of 100 Acres or Greater on BLM lands

Year	Fire Name	Controlled Size	
1998	JUNIPER #2	260.0	
1999	CEDAR CRK N	2850.0	

Source: Randy Schardt, BLM State Office, June 2005

#### **Disaster Declarations**

A USDA fire disaster declaration, designated on 12/22/99, for the incidence period of 10/31/99 and continuing, for "damages and losses cause by excessive winds and fire."

In 2002 a USDA Secretarial Designation for "drought, fire, insects, above and below normal temperatures"----for April 1, 2002 and "continuing" ---included Wibaux County as contiguous----primary was North Dakota.

## **Individual Community Assessments**

#### Wibaux

(Source: Wibaux Firemen)

#### **Current Situation**

This community is located in the central portion of the county on Interstate 94 and State Highways 261 and 7. Properties requiring protection of Wibaux County includes scattered homes, ranches, railroad improvements, wildlands and oil and gas field facilities. Grasslands, farm crops and CRP acres present a moderate risk in late summer or early fall surround Wibaux. Within the city limits the risk of wildfire is moderate. CRP acres on many of the ranches are a risk to wildfire ignitions both from farm machinery and lightning. The Wibaux Volunteer

Fire Department is very concerned about these areas because they can be very volatile under dry, windy conditions.

The Wildland Urban Interface (WUI) boundaries established by the fire department follows the standard one half mile buffer around the Town of Wibaux and St. Philip.

### **Future Development**

There has been some additional activity in the oil fields recently and the projected activity will remain high as long as fuel prices stay elevated. There are new oil wells in the planning stages and some production is taking place. This activity is in the southwestern part of the county where Wibaux, Prairie, Fallon and Wibaux counties join together. Additional construction and the related impacts of more oil field workers in the area will most likely increase the activity for the Fire Department.



Wibaux Volunteer Fire Department Hall

#### **Assessment of Fuel Hazard**

## **Vegetative Fuels**

Wibaux County has basically three fuel types: relatively flat lowland areas primarily used for agriculture, the badlands and what is locally referred to as the pine unit (an area of mixed juniper/ponderosa pine in a long north to south stringer coming from Fallon County, through Wibaux County and ending up in Dawson County in Makoshika State Park. In the agricultural areas other than the croplands, consists of light to moderate vegetation in the grasslands. The badlands are sparsely vegetated remote areas. The pine unit is the heaviest live fuel concentrations in a contiguous stringer of timber that extends for many miles.

The agricultural lands of the county have low potential for fire until crops cure out and become dry from mid summer into the fall. In a dry year, the fire danger increases greatly. There can be hundreds of acres of dry crops, which are very susceptible to both, lightning, human caused or machinery caused ignitions. The badlands areas are susceptible to wildfire, but typically because of the low density vegetation does not support large fires. The pine unit however is a different situation that has the potential to carry fire for a long distance. It is coupled with high value oil fields with many field improvements. The past two BLM fires shown on the above map and chart are located in this pine unit. Firemen agree that this area has the greatest potential for a very large fire.

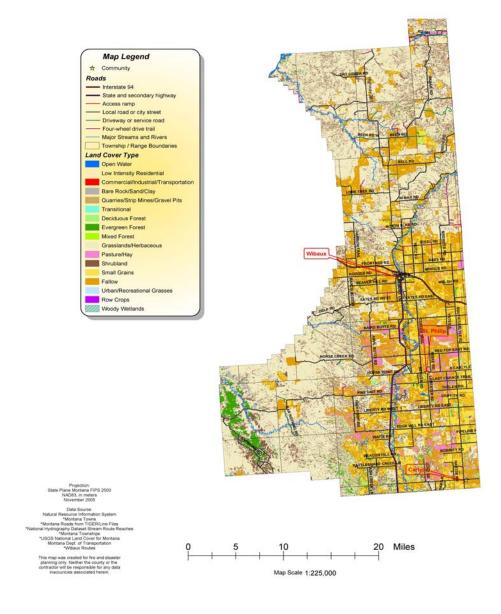


Pine Unit in southwest Wibaux County—Note heavy concentrations of contiguous fuel.

Detection of fire starts is a problem in the badlands and the pine unit. Low population densities and the remoteness can allow a fire to burn for some time before it is detected. In very dry years natural grasses and juniper/ponderosa pine can support rapidly spreading fire. Wibaux County like most of eastern Montana experiences strong winds much of the year, which adds to suppression difficulty. Thunderstorms are a major source of source of ignition.



# VEGETATION TYPES



## **Structural Fuels**

With the exception of rural residences, structural fuel hazards are located within or in close proximity to Wibaux or the scattered farmsteads and ranches about the county. From personal observation, most buildings and homes are typical stick frame construction with wooden or manufactured siding. They usually have composite asphalt roofing materials. For the most part not much attention is paid to the type of building materials or defensible space for reduction of loss to wildfire.

#### **Assessment of Risk**

## **Ignition Profile**

In 2001, three communities in Wibaux County were identified as a medium risk to wildfire in the Federal Register. The listed communities at risk were Wibaux, St. Philip and Carlyle. According to the local firemen Carlyle no longer exists. St. Philip has an active church and an old dance hall that is still used occasionally according to the County DES Coordinator, Frank Datta, July 2005.

The Core Group members for the CWPP identified these ignition sources for wildland fire during the second CWPP meeting held in Wibaux in March 2005.

- 1. Lightning
- 2. Rural residents
- 3. Power lines
- 4. Railroads
- 5. Highways/roads
- 6. Recreation activities
- 7. Escaped residential control burns
- 8. Haying/combining activities
- 9. Oil field activities
- 10. Methamphetamine labs
- 11. Fireworks

Discussion with local firemen indicates that there are no obvious patterns or alleys of lightning ignitions. Haying and combining fire starts in the latter part of the summer were mostly caused by equipment malfunctions.

Risk of human-caused ignition is highest along roads and highways, railroads, power lines and around recreation sites. Risks of human-caused ignition are moderate in areas of dispersed recreation and rural residences. Risks of ignition to wildlands are lowest within the developed areas and on agricultural properties, except in late summer in dry years.

Hunting season appears to be the most active time of human-caused ignitions. Firemen have expressed concerns about the growing possibility of methamphetamine labs having the potential for fire ignitions in remote areas.

### **Behavior and Development Trends**

There is little or no new development other than oil field activity.

Much of eastern Montana and western North Dakota is experiencing a boom in oil field activity. This oil field activity is and will continue to increase the Fire Department's response numbers. More traffic incidents have been occurring and with those come wildfire ignitions and hazardous material spills.

### **Unique Wildfire Severity Factors**

Drought over the past 7 or 8 years has left the cedar (juniper) and ponderosa pine trees in the badlands in a stressed condition. Live fuel moistures in these trees have been very low and are conducive to greater spread rates for fire. (Brad Sauer, Fuels Specialist, BLM, June 2005).

Wheat, oats, barley, peas, lentils, safflower, alfalfa, grass mixed with alfalfa, alfalfa grass mixture, durum, and green peas are the main crops for the county (Jan Just, FSA, June 2005). Oil and gas is produced and stored in the southwestern and western portions of the county. Wildland fire in the areas of oil production has the potential to interrupt production for short periods of time. Human activity in the oil fields also increases the chances for ignition of wildfire.

Critical community infrastructure was identified by the PDM steering committee. The values for the critical infrastructure are provided in Chapter III of this plan. Most of the county's critical facilities are at low risk for wildfire.

Agriculture in Wibaux County consists mainly of dryland farming and ranching. Farm and ranch assets that could be at risk to wildfire are the buildings, crops, livestock, grain and hay storage and machinery.

Tourism/recreation is a small sector of the economy of Wibaux County. Both residents and visitors enjoy outdoor activities year-round in the county. Most of this activity is in the fall months for deer and upland bird hunting.

#### Values to be Protected

- 1. Health and Safety of the public and firefighters
- 2. Real property, public and private infrastructure
- 3. Cropland/Grazing lands
- 4. Recreation/Economic Impacts

### 1. Health and Safety

Wibaux County has a marginally staffed volunteer firefighting force, which has its entire operation in the fire hall located in Wibaux. Sparse population numbers and poor communication systems between firefighters, EMS personnel and other support functions can add more safety challenges to fighting wildfire.

Wibaux County is concerned about the health and safety of their volunteer fire department personnel.

Adding to that concern the county has been in a drought situation for nearly a decade. The potential for greater number of fires at one time and large fires exist under these strained drought conditions. Wibaux County Fire Department has a good safety record in suppression of wildfires and desires to maintain that record. Circumstances related to these conditions demand that attention be paid to the safety of the firefighting staff and the public. Training of personnel to meet requirements in ample numbers and to maintain their qualifications to meet the county's suppression needs is important for safety.

## 2. Real Property, Public and Private Infrastructure

In some parts of Wibaux County, wildfires are not only a threat to the landscape, but also to homes, farms, ranches, businesses or infrastructure facilities. Two of the biggest concerns in terms of fuel concentrations are found in either Conservation Reserve Program acres or in the pine unit in the southwestern part of the county. These two categories of lands should be looked at closely in terms of putting people and property at risk.



Oil field development in southwest Wibaux County

### 3. Cropland and Grazing Lands

Wibaux County depends heavily upon agriculture for much of its income. Croplands, especially in late summer can be at risk to wildfire. Losses of crops can be very devastating to ranchers and farmers. These losses also affect other businesses and the county tax base.

Grazing of private, state and federal land is also an important component to some ranching operations. Losses of forage to wildfire have the same impact as noted above.

#### 4. Recreation and Economic Impacts

Recreation Resource

Hunting and fishing provide recreation experiences in the county for residences and non-residents. Non-resident hunters come primarily from the upper Midwest.

Wildfire has the ability to impact recreation in Wibaux County. The hunting season, both big game and upland bird have a positive economic impact. Wildfire season usually occurs during late summer and fall when these activities are occurring and can easily deter deer and bird hunters from coming to the area if there are fire closures or active wildfires going on

#### **Assessment of Economic Values**

The county's two largest economic sectors are services and retail trade. Detailed economic information is provided in Chapter III.

#### **Assessment of Ecological Values**

As a result of the ranges in elevation, aspect, temperature, precipitation, vegetation, and terrain in the county, Wibaux County has a large amount of intact native wildlife habitat. According to John Ensign, Region 7 Wildlife Manager for the Montana Fish, Wildlife and Parks (FWP) there has been little formal inventories of fish and wildlife populations in the county. There are big game species such as white-tailed deer, mule deer and antelope. There are upland game birds, mostly sharptailed grouse, Hungarian partridge, sage grouse and pheasant. In addition, numerous small mammals, fur-bearers, and migratory and non-migratory songbirds reside in the county. Raptors residing in the county include golden and wintering bald eagles; kestrels, red-tailed hawks, Swainson's and ferruginous hawks, prairie falcons and owls. Since there are no major rivers in the county, fish species are limited to warm water species found in ponds. Little Beaver Creek does support catfish and some northern pike. Some of the deeper ponds do have trout on a put and take basis.

Wibaux County has eight participating landowners in Block Management with FWP according to Bea Sturtz. Block management lands are private lands that are made available for public hunting.

Air quality is generally excellent due to natural dispersal and lack of major industrial in and to the west of the county. Short-duration impacts to air quality include smoke from wildland fire in the summer and fall, smoke from ditch burning in the spring, dust from travel on unpaved roads and dust from agricultural practices.

#### Potential Loss Estimate-Wildfire Scenario

A wildland fire scenario has been developed in order to estimate potential losses. A lightning storm moves into the southwestern part of Wibaux County in late July. The storm is dry and a lightning strike starts a fire in the pine unit amongst several oil field tank batteries and pumps. The storm creates strong southwesterly winds. The fire burns 230 acres before the wind dies down in the late evening and the Fire Department is able to stop it at a road as it moved northeasterly. Damages and suppression costs total \$200,045.

Table 5.3 Pine Unit Oil Field Fire-Wibaux County

Asset	Number	Cost per each	Total cost
Oil Storage tanks	3	\$ 20,000	\$ 60,000
Processing vessels	3	\$40,000	\$120,000
Outbuilding/valves/pumps	1	\$ 20,000	\$ 16,000
Suppression costs	1	\$4,015	\$4,045
Total			\$200,045

Source: Steve Spriggs, Encore

Fire suppression costs were determined by conversations with Randy Sanders, Department of State Lands (and also past volunteer fireman for the Savage F.D.) These figures are what the Department of State Lands approximately pays for contracting these types of fully staffed engines.

3 Type 6 engines, fully staffed at \$1330/14 hour shift	\$3990
Food and water	\$55
Total	\$4045

## Assessment of Fire Protection Preparedness and Capability

Table 5.4 Fire Staffing

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Department	Number of Volunteers			
Wibaux Volunteer Fire Department	22			

# <u>Wibaux County Fire Fighting Capability</u> Table 5.5 Fire Apparatus in Wibaux County

	Description	Capacities/Features/Comments
Department		-
Wibaux	Dodge type 6 engine, 1996	350 gal.
Wibaux	Ford tender, 1976	1200 gal.
Wibaux	Dodge type 6 engine, 1995	300 gal.
Wibaux	Chevy type 6 engine, 1991	325 gal.
Wibaux	Chevy type 6 engine, 1984	325 gal.
Wibaux	Dodge type 6 engine, 1974	300 gal.
Wibaux	Chevy pumper, 1970	750 gal.
Wibaux	Chevy tender, 1993	900 gal.
Wibaux	Freightliner tender, 1995	2200 gal.
Wibaux	Turnouts	25 each
Wibaux	SCBA's	Viking, 12 each
Wibaux	Radios	Motorola, 20 each
Wibaux	Generators	Honda, 2 each
Wibaux	Ford, 1981	Search and rescue
Wibaux	Chevy, 1988	Suburban

Source: Fire Chief

**Table 5.6 Fire Fighting Capability Ratings** 

		<u> </u>	,
Department	ISO Rating for	Rating for grass	Rating for wildfire
	Structure Fires	fire capability	capability
Wibaux VFD	7	2	2

 ISO=Insurance Services Organization Source: Wibaux Fire Chief
 1 is very able, 10 is unable

In addition to the above resources, the BLM has one Type 6 engine with a response time of one hour from Ekalaka (to Wibaux); one Type 6 engine with a response time of two hours from Camp Crook, SD (to Wibaux); one Type 6 and two Type 4 engines with a response time of 1.5 hours and two Singe Engine Airtankers with a response time of one hour from Miles City (to Wibaux).

Over the past 30 years Wibaux County received the following funds through the Rural Community Fire Protection Grant (RCFP), the Volunteer Fire Assistance Grant (VFA) and the Rural Fire Assistance Grant (RFA). Source: Mike Weiderhold, DNRC, Missoula, June 2, 2005. The funds received through these programs have improved the capability of the Fire Departments through purchase of fire equipment, especially in the last four years.

**Table 5.7 Fire Assistance Funding** 

	RCFP	VFA/RFA	FVA/RFA	FVA/RFA	FVA/RFA	Total
	75-2000	2001	2002	2003	2004	
Wibaux	15,837	16,544	10,638	20,000	20,000	83,019

Source: Mike Weiderhold, DNRC

#### **MITIGATION**

## Background

### a. Existing situation

Most of the critical infrastructure in the county is in defensible space for wildfire.

Wibaux County has been in a drought for almost a decade. Historically this is a common cycle in weather patterns broken by periods of above average moisture. In the spring and early summer of 2005 rainfall has been far above average. However, live fuel moistures in juniper trees are still below normal. (Brad Sauer, Fuels Specialist, BLM, Miles City, MT, June 2005). The drought may have been mitigated some, but it is still in effect. To recover from the current drought situation, it will likely take years of above average precipitation.

Recent history indicates that most wildfires are relatively small, about 25 acres and have not been a serious threat to the communities. However, there have been several large fires in adjacent counties and the potential under the right weather and fuel conditions wildfire could enter the urban interface or certainly impact rural residences. The county does have some notable issues with structures and facilities near CRP lands across the county and crops from midsummer into the fall.

The fire service in the county has a number of positive attributes. They have trained and dedicated firefighters. The equipment for the fire department appears to be relevant to their needs, however some of it is becoming outdated. Volunteer firefighters' numbers seem to be appropriate currently, but as with almost any volunteer fire department, many of the firefighters are not available part of the time. Training for volunteer firefighters is usually a challenge for most departments. It is difficult to find the time to work in training, when most have jobs and other responsibilities. Wibaux County having a very small population, most of the volunteers are spread thin and wear many hats, however the level of fire protection in Wibaux County is good and the fire department has historically been effective in keeping their fires small.

#### b. Organizational structure

During the first CWPP meeting several key firefighters were present. In order to have a group to work with the contractor, a Core Group was established at the first meeting. The Core Group consisted of the Fire Chief, the training officer and another firefighter. There was also assistance from the Montana Department of Natural Resources and Conservation, BLM, District IV DES Representative, and Farm Services Agency. The contractor took feedback provided from the Core Group to develop this mitigation plan. Once the plan was written the Core Group and the others mentioned above had the opportunity to review the plan to add,

subtract or modify it. Public involvement was solicited at the third PDM meeting and those items were included in this plan. The draft CWPP went out for a 30 day review in September, 2005 and those comments were incorporated in the finalization of the CWPP.

### Goals and Objectives

The intent of developing the Community Wildfire Protection Plan is to reduce the impacts of wildfire to the county. The contractor and the Pre-Disaster Mitigation Steering Committee developed the following goals, objectives, and projects.

<u>Goal 1</u>: Reduce the area of Wildland Urban Interface and critical resources burned.

- \* Objective 1 Provide latest information to landowners on CRP rule changes affecting fire protection.
- 1.1.1 FSA make available current guidelines and examples that reduce risk of fire to improvements and buildings. Examples include information on haying perimeters of CRP areas as a firebreak.
  - \*Objective 2 Evaluate fire equipment locations to see if re-positioning would help improve response times.
- 1.2.1 Coordinate with oil field production companies to see if placing fire equipment near the oil fields in the Pine Unit would improve response times.
- 1.2.2 Look at opportunities to place fire equipment in other strategic locations within the county.
  - \*Objective 3 Request that the BLM and DNRC plan and implement fuels reduction projects.
- 1.3.1 Look at opportunities to do fuels reduction projects and continue the work on the projects in the Cedar Creek area.
- Goal 2: Educate the public about wildfire in the county.
  - \* Objective 1 Have the Fire Department make direct contact with county residents about wildfire safety.
- 2.1.1 Fire Department sponsor a booth at the County Fair to talk about defensible space for landowners.
  - \* Objective 2 Notify the public about fire danger ratings.
- 2.2.1 Place a fire danger rating sign in the town of Wibaux.

- Objective 3 Develop a method to inform hunters in high fire danger years of the risk of wildfire.
- 2.3.1 Develop information (such as posters, flyers, placemats, and other) aimed at sportsmen to put in motels, restaurants, bars, etc.
- 2.3.2 Work with the Montana Department of Fish, Wildlife and Parks to have information posted at Block Management sign-up locations.
  - Objective 4 Share fire preparedness expertise.
- 2.4.1 Have the Fire Department publicize their willingness for firefighters to come to a farm, ranch, business, home and offer suggested methods of reducing fire danger around their properties.
- 2.4.2 Share information with landowners contained in "Living with Fire, A Guide for the Homeowner" Northern Rockies Coordinating Group publication.
  - Objective 5 Reduce farm equipment fire starts.
- Initiate a campaign to have fire extinguishers installed on agricultural 2.5.1 equipment such as balers and combines.
- Goal 3: Expand firefighting capabilities.
  - Objective 1 Maintain training to keep a qualified firefighting staff for current and changing conditions.
- 3.1.1 Conduct a training session for firefighters on the hazards of dealing with methamphetamine started fires.

### **Desired Condition/Strategic Plan**

The desired condition for Wibaux County is to maintain a safety conscious, well-trained firefighting force with adequate personal protective equipment and up-to-date fire apparatus commensurate with the county's needs. The strategic plan to reach this desired condition is in the table below.

Table 5.8 Strategic Plan

	l able 5.8 Strat		T
Project No.	Description	Ranking	Potential Resources to
			Accomplish
1.1.1.	FSA information on CRP	Н	FSA and F.D.
	lands		
1.2.1.	Coordinate with oil	M	F.D., BLM, DNRC and
	companies to place fire		oil field production
	equipment		companies
1.2.2.	Evaluate county for fire	М	F.D.
	equipment placement		
1.3.1.	Request BLM and DNRC	М	F.D. BLM and DNRC
	plan and implement fuels		
	projects, including ongoing		
	work in Cedar Creek		
2.1.1.	F.D. sponsor fire	М	F.D.
	information booth at fair		
2.2.1.	Place fire danger rating sign	М	F.D. and local business
	in Wibaux		sponsor
2.3.1.	Develop information poster	L	F.D., FWP and local
	for hunting season		businesses
2.3.2.	Work with FWP on posting	М	F.D., FWP and Block
	Block Management areas		Management
	with fire danger information		landowners
2.4.1.	Publicize F.D. willingness to	Н	F.D.
	meet with landowners		
2.4.2.	Utilize "Living with Fire"	М	F.D., landowners
	publication		
2.5.1.	Campaign to place fire	М	F.D., ranchers and
	extinguishers on farm		farmers
	equipment		
3.1.1.	Training session for meth	Н	F.D. and law
	lab started fires		enforcement

\*F.D.-Fire Department, FSA-Farm Services Agency, DNRC-Department of Natural Resources and Conservation, BLM-Bureau of Land Management and FWP-Fish, Wildlife and Parks

The above rankings were made by the contractor using three criteria, 1) public and firefighter safety, 2) minimize the area burned in the WUI, and 3) raising public awareness for prevention of wildfire

## **Implementation**

## **Roles and Responsibilities**

The goals in this Community Wildfire Protection Plan will be realized through implementation of the projects. The plan contains a variety of types of projects. Due to the variety, many individuals and agencies will play a role in project implementation.

Individual property owners will be responsible for educating themselves with the help of the fire department and taking appropriate action to create defensible space around their structures, both residential and commercial.

Businesses, such as Encore Operating LP may be involved in sharing expertise with the fire department with potential oil field fires. The Wibaux Pioneer Gazette may be asked to run articles to assist in recruiting new firefighter effort.

County responsibilities fall in the area of education on existing regulations and investigation of additional regulatory needs. The county may also assist in bringing together parties for cooperative projects.

The Department of Natural Resources and Conservation will continue to provide assistance to local fire departments in the form of grants, technical expertise, and resources.

The Bureau of Land Management (BLM) will both provide technical assistance, project funds, suppression assistance, educational materials, and training. The BLM will schedule and carry out fuel reduction projects in cooperation with neighboring landowners including other agencies and private individuals.

The Farm Services Agency may be asked to assist in educating producers about regulations dealing with methods of fuels reduction on Conservation Reserve Program acres and monitoring the acreage enrolled in the CRP as a way to better understand the fuel hazard.

The Federal Emergency Management Agency (FEMA) may provide grant funds to accomplish projects and may be involved in post-disaster assistance in the event of a catastrophic fire.

#### Schedule

No firm schedule has been established for accomplishing the listed projects. Accomplishment of projects depends on the availability of resources and funding.

As required by the National Fire Plan, federal agencies are to align their funding and staff resources with the priorities expressed in this community wildfire protection plan. As a result, accomplishment of many of the projects will depend on the funding and staffing of the BLM. Additionally, the amount of VFA/RFA funds available to the local fire department will have an effect on the ability of the department to participate in the planning and execution of projects on the ground.

By jointly identifying the projects and their priorities with town, county, state, and federal partners, it is hoped that project planning and execution will be well coordinated and occur first on the highest priority projects.

## Plan Review and Updating

This plan should be reviewed for currency every three to five years, unless there are major changes in the county that would require an earlier update. Items that may initiate a need for a change in the plan would be things like a major wildfire, accidents involving serious injury or loss of life related to wildfire, or a change in county leadership. The county commissioners have the responsibility to make that determination. They may wish to enlist the help of the Local Emergency Planning Committee.

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# **Meeting Notes and Sign-in Sheets**

# Community Wildfire Protection Plan for Wibaux County Feb 9, 2005, 11 a.m.

### **Meeting Notes**

## Objectives for this meeting

- \*Give you an introduction to the project
- \*Explain the purpose of the project and the scheduling to get it accomplished
- \*Enlist your help.....you have the knowledge of the local situation and know best what your county needs
- \*Need your help to identify the wildfire hazards and prioritize those
- \*Have you identify the critical facilities and the vulnerable populations in communities and the county
- \*Give me a sense of the values at risk (examples: high value forage, critical wildlife habitats, etc)
- \*Have you understand that this is a plan for the county's use and the more involvement I get from you and the county, the more useful it will be and the better your chances are for funding of additional on-the-ground projects.
- \*Establish a Core Group of key individuals to work with me on this project

### **Funding**

\*Funds from the BLM have paid for the contract to develop these plans for your county. The contract products are both a Predisaster Mitigation Plan and a Community Wildfire Protection Plan. Cossitt consulting out of Park City, MT has the contract....we have 5 counties, McCone, Richland, Wibaux, Wibaux and Prairie. McCone County has agreed to be the primary contact for all of these counties for the administration of the contract. However, the contents of the plans will come from each of the counties. The PDM plan will take into account all hazards and the CWPP focuses on wildfire as part of that plan. My job is to help these counties develop a CWPP that suits the county's needs.

### A little background on Community Wildfire Protection Plans

- \*2003 Healthy Forest Restoration Act (primarily affects BLM and Forest Service)
  \*provides incentives for communities to get involved in fire protection
  - \*several reasons, who knows better than the local folks what they need
  - \*once a plan is developed, makes counties and communities more competitive for project \$'s

\*allows lots of flexibility---some minor requirements, but depth is really up to you

## \*Minimum requirements of CWPP are:

- \*1 <u>Collaboration</u>....developed by local and state government reps in consultation with federal agencies (in this case the BLM)
- \*2 <u>Prioritized Fuel Reduction</u>... identifies and prioritizes areas for hazardous fuel reduction treatments & recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure---usually done by the local fire depts..
- \*3 <u>Treatment of Structural Ignitability</u>.... recommends measures that homeowners and communities can take to reduce the ignitability of structures throughout the area of the plan.

## Who must mutually agree to the final contents of the plan?

- \*Local governments (county and communities)
- \*The local fire departments
- \*State entity responsible for forest management, DNRC

The above group will need to <u>consult</u> with local representatives of the BLM...my contact for the BLM for this project is through Dena Lang from Miles City, who I have found to be very helpful and interested in seeing the county get a grassroots-based plan.

## What kinds of things can be addressed in the plans?

\*wildfire response, hazard mitigation (projects to reduce hazards), community, preparedness, structure protection...whatever you think best suits your communities

#### Other benefits

\*the process can help communities clarify and refine its priorities for protection of life, property, and critical infrastructure (water plant as example) in the Wildland

Urban Interface (more on that in just a minute) It also allows you to determine the boundaries of what your WUI's are.

#### Your role

\*In a series of meetings (probably just 2), phone calls, etc. you can help me describe the setting of your county, identify existing hazards in terms of wildfire, what capabilities the county has for suppression, what projects you would like to do, what the priorities of those projects are and determine what the substance and detail of your plans will be. You will also have the say so on what the WUI boundaries for your communities will be. There are some guidelines for this, but they do allow quite a lot of flexibility. You can also help me by identify other key people who should be involved in this process.

#### Wildland Urban Interface

I want to talk just briefly about this. This is something your group will need to give some thought to in the next few months. The WUI is describes as the zone where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels. This is where a high percentage of the risk to life and property occurs...where it hits the fan so to speak. It is where the most complex and dangerous situations for firefighters exist.

One of the most important benefits of having a CWPP completed is that it allows you to establish your WUI interface. Without a CWPP the boundaries are limited to within ½ mile of a communities boundary or within 1 and ½ miles when mitigating circumstances exist (example....a long steep slope leading into a community with heavy vegetation) This is a canned definition that may not fit your communities, but with a CWPP you dictate where that boundary is to be drawn. Once the plan is accepted, the WUI boundary is given a higher priority for funding than non-WUI lands. Half of the Healthy Forest Restoration Act funds must be spent in the WUI. I should also mention that fuel treatments can occur along evacuation routes regardless of the distance from the community.

#### Questions?

What are the hazards related to wildfire in this county and in your communities?

The Pine Unit south and west of Wibaux. (this is an area of mixed ownership of private and BLM lands) It is noted that this timber has no value as saw timber because it is too short and too limby. There is also significant oil and gas exploration ongoing in this area as well. There are large numbers of oil and gas facilities, such as well sites, tank batteries and other associated structures.

Conservation Reserve Program (CRP) lands with large fuel build-up. Many of these properties have ranch or farm buildings near them.

Can you give me your first cut on how you would prioritize them?

They are prioritized in the order they are listed above.

# What are the critical facilities in the county and how would you prioritize them?

The Town of Wibaux itself is at low risk for wildfire.

As mentioned above there a numerous oil and gas wells in service.

There are several natural gas substations within the county.

What are the vulnerable populations in the county and what priorities would you put on them?

Nursing home residents---40 bed facility in Wibaux

Elementary and High School in Wibaux

Medical clinic that operates 3 days per week in Wibaux.

What other values besides infrastructure and people would you want to be part of the plan?

# What mapping resources can you give me to serve as a Base Map for this project?

BLM maps and County Maps

I would like to establish a Core Group of people this evening for the CWPP so that we can agree upon who should be involved and is willing to work on the plan.

Before we do this, I think you need to understand what my philosophy is and that I think the Core Group's job is to provide me with the needed information. It is my job to put this in writing in a format that is acceptable to you and to the BLM. Said in another way, you give me the data and what you want to see and I will put it down in writing to get us to something that is usable for you when we are finished. I also would like, depending on your wishes is to get almost all of the information I need from you before July 1<sup>st</sup>. I know that you and I are likely to be busy with the fire season and I would prefer to not have the extra burden of the fire season and the added busyness of the summer get in our way. I need some feedback from you if you are OK with what I just said—both on how I see this going and when I would like to have the bulk of your input to me. That means we will have a nearly complete CWPP before the fire season hits.

Who should be on the Core Group and their titles?

NAME	TITLE		
Brian Nelson	Chief of Wibaux Fire Department		
Bruce Smith	Training officer		
Gerald Job	Fireman		

I would also like to ask that there be a chairman of the Core Group so that I have a single contact that I can work through to get feedback from the Committee. Who should that be?

Brian Nelson, Chief

My <u>recommendation</u> is for one of the members of the CORE GROUP to take this list to your County Commissioners and asks them to bless it. I think you want them to be comfortable right up front with who is on the CORE GROUP.

## What I will be asking you for at the next (2<sup>nd</sup>) meeting.

I will have a draft of the Risk Assessment ready for your review ahead of the meeting. It will involve:

- 1. Fuel Hazards,
- 2. Risk of Wildfire Occurrence,
- 3. Homes, Businesses and Essential Infrastructure at Risk,
- 4. Other Community Values at Risk and
- 5. Local Preparedness and Firefighting Capability.

You will give me feedback on what needs to be changed, what needs to be added for the purpose of having me finalize the Risk Assessment to be part of the plan. I see this as a face to face meeting in late March, depending on the Core Group's concurrence.

# Set tentative date for 2<sup>nd</sup> meeting.

The date was set, but I will need to change it because I was looking on the wrong month on my calendar. I will contact Brian Nelson and try to work out a new date and have him notify the other two Core Group members. I hope to set it up for 11 a.m. on Tuesday, March 29<sup>th</sup>.

## What I will be asking for in late May or June

There are 3 things that need to be completed:

- 1. Establish final prioritization of recommended fuel treatment projects and the preferred treatment methods.
- 2. Develop an Action Plan and Assessment Strategy, which defines roles and responsibilities, funding needs and timetables for highest priority projects.

3. Finalize the Community Wildfire Protection Plan....the Core Group will decide on the treatment locations, method of treatment, establish the WUI boundaries, structural ignitability recommendations and any other information or actions you want in the final plan.

Other available resources for you to consider:

BLM office in Miles City....Dena Lang as a contact person. Eastern Land Office of the DNRC...Randy Sanders as a contact person.

These sources have expertise in fuels management, lands issues, mapping, fuel types, etc. My contacts with these people have found them interested and willing to help wherever they can.

	Attendance S	heet				
Activity CWPP INITIAL	MEETING					
	2005					
Duration   Now						
				Agency Use Only		
Name & Title	Affiliation	E-Mail Address & Phone#	H	M	T	
Name: Bruce Smith	1312 110	406-796-8239		T	Г	
Tille: Training Officer	Wibaux VFD		1			
Name: Brain Nelson	h	406-196 - 2605 POB 45 5935				
Title: President			3			
Name: Gerald Sub	Ц	406-196-8105				
Title:						
Name: Randy San dels Tile: File Program Manager	00100	rasanders Ontogov				
Tille: File Program Manager	DIVAC	233-2904				
Name:	:					
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## Second round of meetings for CWPP with Core Group for Wibaux County

Meeting was held at 11 a.m. on March 29th, 2005 at the Wibaux Fire Hall

Attendees sign in sheet is attached.

#### CRP lands

After introductions we discussed what the possibilities are with Conservation Reserve Program lands are. Jan Just from the local Farm Services Agency office gave us a briefing on CRP. The rules of CRP lands have changed since 2002 and those changes allow for some mowing to reduce the fire danger. Firebreaks are also now acceptable. There are two kinds of firebreaks, barren ground or mowing. In order to conduct firebreaks on CRP lands an amendment must be made to the conservation plan through the FSA office.

If there is a going fire it is permissible to blade or disk on CRP ground to stop a fire. This does not require contact with the FSA in an emergency situation.

A portion of the risk assessment (values at risk and the assessment of fire protection preparedness and capability) was handed out for the Core Group to look at for changes or omissions. They were given a month to review and give their comments back to me.

## Fire Frequency/Fuels hazards

We revisited what fuel types they typically fight fire in and they validated that the information gathered on the first meeting was sufficient. We talked about fire frequency and if there were any places in the county that seem to show a pattern of lightning starts. No readily identifiable pattern exists.

For future feedback I asked for several items:

From the portion of the Risk Assessment I handed out I asked them to validate the preparedness and firefighter capability.

We had a discussion about what should be on the base map and the items asked for where: 1. critical infrastructure/water sources/etc, 2. Wildland Urban Interface boundaries, and 3. a wish list of attributes they would like to see on a base map.

#### **Draft Goals for the CWPP**

We reviewed the draft goals and the core group agreed to the ones as presented.

#### **Ignition Sources**

We went over the draft list of these and the group added 1. remove industry, 2. haying/combining, 3. oilfields, 4. meth labs and 5. fireworks

#### **Project Proposals**

The group had a discussion about hazardous fuels reduction and educational component is desired (both for firefighters and the public). The group talked about that this effort was not for acquisition of equipment or gear. Herzberg encouraged them to include projects on state and BLM lands. Signing is also a possibility for a proposal, such a fire danger rating signs in key locations. Herzberg told them that we were interested in a wide range of projects and if they had any questions about whether or not a project would be considered to call Dena Lang 233-2907 or me at 446-2121.

Herzberg asked for a list of <u>preliminary projects</u> by April 30<sup>th</sup>.

We talked about what was next in the project. Herzberg told them that his job was to collect their information to create a final draft of the risk assessment, which they will have a chance to review. After the contractor gets their comments back, Herzberg will finalize the risk assessment and then begin on the mitigation plan.

Rand Herzberg

	Attendance Sh	aaf		
Activity CWPP Core G	nerva Maneti	GGL		
Location Wibaux	_ Date(s) _ Mar	29,2005		
Duration 1.25 hours	_ Date(s)	W 61/2005		
			Ager	ncy Use Only
Name & Title	Affiliation	E-Mail Address & Phone#	- Agen	M T
Name: BRUCE SMITH	11 -			
Tille: Training Officer	Wibean F.D.			
Name: Gerald Gob	a			
Title:				
Name: Brian Nelson	1			
Title: Chief				
Name: JAN Wust	Farm Services			
Title: FSA	Ageney			
Name: Dena Lang	BLM File	-		
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## **Chapter VI: Plan Maintenance and Coordination**

### **Responsible Parties**

The Wibaux County Commissioners will be responsible for ensuring that the CWPP/PDM Plan is kept current and also for evaluating its effectiveness. With the adoption of this plan, the commissioners designate the Wibaux County Disaster and Emergency Services Coordinator and the Chair of the Local Emergency Planning Committee (LEPC) as the co-leads in accomplishing this ongoing responsibility on their behalf.

## **Review Triggers**

Any of the following three situations could trigger review of the plan's effectiveness or currency and update of the CWPP/PDM Plan.

- 1. The occurrence of a major natural disaster either in the county or nearby.
- 2. The passage of time.
- 3. A change in state or federal regulations with which the county must comply.

### Criteria for Evaluating the Plan

When review of the CWPP/PDM plan is triggered by one of the three situations listed above, the plan will also be evaluated for effectiveness and comprehensiveness. The criteria against which the plan will be evaluated will include, but not be limited to;

- Whether any potential natural hazards have developed that were not addressed in the plan,
- Whether any disasters have occurred which were not addressed in the plan,
- Whether any unanticipated development has occurred that could be vulnerable to natural disasters, and
- Whether any additional project ideas have been developed.

#### **Procedures**

Should a major natural disaster occur in Wibaux County the LEPC shall meet following the disaster to review the after action report. Upon review of this report, any changes needed to the CWPP/PDM Plan will be recommended to the County Commission and made by the County Disaster and Emergency Services Coordinator following their concurrence.

In the absence of a major natural disaster, each January starting in 2007, the LEPC will meet to review the CWPP/PDM Plan and recommend any needed changes. The LEPC meeting will be noticed in the Wibaux Pioneer and the

public and individuals who served on the Steering Committee for development of the original plan will be encouraged to attend. In the interim, the County Disaster and Emergency Services Coordinator will maintain a file into which comments or input on changes to the plan can be kept. The comments in this file will be provided at the LEPC/public meeting to review the plan.

Finally, should state or federal regulations with which the County must comply be significantly changed, the County Disaster and Emergency Services Coordinator will notice and hold an LEPC meeting. At this meeting he/she will inform the LEPC of the new requirements and together with the LEPC, determine whether changes to the PDM Plan are warranted.

Every five years, beginning in 2010, the CWPP/PDM Plan will be submitted to Montana Disaster Emergency Services and subsequently to the Federal Emergency Management Agency (FEMA) for approval.

### **Incorporation into other Plans**

Wibaux County is involved in the multi-county effort to prepare an interoperable communications plan. The County Disaster and Emergency Services Coordinator is involved in the communications planning and can see that any relevant information in this plan is provided to that effort and that this plan is referenced in the communications plan as appropriate.

Neither the town nor the county has a growth plan. The preparation of growth plans by either jurisdiction is not anticipated. No other planning efforts have been initiated at this time.